Explore Your Environment K-8 Activity Guide
SC Academic Standards Correlations

PROJECT LEARNING TREE SOUTH CAROLINA

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Note: While PLT has assigned specific activities to specific grade bands, many activities also offer a **Variation** to meet the needs of an expanded grade level. Correlations to grade-band variations of activities are noted as **(V)**. Each activity also has **Enrichment** ideas to extend the learning experience of the activity. Correlations to enrichment components of activities are noted as **(E)**.

KINDERGARTEN STANDARDS

Kindergarten Science Performance Expectations Correlation to PLT Activities

Performance Expectation	PLT Activity
K-PS2-1. Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	
K-PS2-2. Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.	
K-PS3-1. Make observations to determine the effect of sunlight on Earth's surface.	
K-PS3-2. Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.	
K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive	Backyard Safari Birds and Bugs Diversity Here We Grow Again The Closer You Look Trees as Habitats Discover Tree Factory
K-ESS2-1. Use and share observations of local weather conditions to describe patterns over time.	
K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.	Did You Notice? Trees as Habitats We All Need Trees
K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.	Adopt a Tree Backyard Safari Birds and Bugs Here We Grow Again Trees as Habitats Discover Diversity
K-ESS3-2. Ask questions to understand the purpose of weather forecasting to prepare for and respond to severe weather.	
K-ESS3-3. Obtain and communicate information to define problems related to human impact on the local environment.	Make Your Own Paper We All Need Trees

Kindergarten Reverse Correlations – Science

PLT Activity	Science Performance Expectations
Adopt a Tree	K-ESS3-1
Backyard Safari	K-LS1-1 K-ESS3-1
Birds and Bugs	K-LS1-1 K-ESS3-1
Did You Notice?	K-ESS2-2
Here We Grow Again	K-LS1-1 K-ESS3-1
Make Your Own Paper	K-ESS3-3

The Closer You Look	K-LS1-1		
Trees as Habitats	K-LS1-1	K-ESS2-2	K-ESS3-1
We All Need Trees	K-ESS2-2	K-ESS3-3	
Discover Diversity	K-LS1-1	K-ESS3-1	
Tree Factory	K-LS1-1		

Kindergarten Mathematics Standards Correlation to PLT Activities

Standards	PLT Activities
K.NS.1 Count forward by ones and tens to 100.	
K.NS.2 Count forward by ones beginning from any number less than 100.	
K.NS.3 Read numbers from 0 – 20 and represent a number of objects 0 – 20 with a written numeral.	Backyard Safari Birds & Bugs
K.NS.4 Understand the relationship between number and quantity. Connect counting to cardinality by demonstrating an understanding that: a. the last number said tells the number of objects in the set (cardinality); b. the number of objects is the same regardless of their arrangement or the order in which they are counted (conservation of number); c. each successive number name refers to a quantity that is one more and each previous number name refers to a quantity that is one less	Backyard Safari Birds & Bugs Every Tree for Itself
K.NS.5 Count a given number of objects from 1 – 20 and connect this sequence in a one-to one manner	Backyard Safari Birds & Bugs Discover Diversity Every Tree for Itself Tree Cookies
K.NS.6 Recognize a quantity of up to ten objects in an organized arrangement (subitizing).	Every Tree for Itself
K.NS.7 Determine whether the number of up to ten objects in one group is more than, less than, or equal to the number of up to ten objects in another group using matching and counting strategies.	
K.NS.8 Compare two written numerals up to 10 using more than, less than or equal to.	
K.NS.9 Identify first through fifth and last positions in a line of objects.	Birds and Bugs
K.NSBT.1 Compose and decompose numbers from 11 – 19 separating ten ones from the remaining ones using objects and drawings.	Birds & Bugs Every Tree for Itself
K.ATO.1 Model situations that involve addition and subtraction within 10 using objects, fingers, mental images, drawings, acting out situations, verbal explanations, expressions, and equations.	
K.ATO.2 Solve real-world/story problems using objects and drawings to find sums up to 10 and differences within 10.	Backyard Safari Discover Diversity
K.ATO.3 Compose and decompose numbers up to 10 using objects, drawings, and equations.	
K.ATO.4 Create a sum of 10 using objects and drawings when given one of two addends 1 – 9.	
K.ATO.5 Add and subtract fluently within 5.	

K.ATO.6 Describe simple repeating patterns using AB, AAB, ABB, and ABC type patterns.	
K.G.1 Describe positions of objects by appropriately using terms, including below, above, beside, between, inside, outside, in front of, or behind.	Backyard Safari Fallen Log Trees as Habitats
K.G.2 Identify and describe a given shape and shapes of objects in everyday situations to include two-dimensional shapes (i.e., triangle, square, rectangle, hexagon, and circle) and three-dimensional shapes (i.e., cone, cube, cylinder, and sphere).	Adopt a Tree
K.G.3 Classify shapes as two-dimensional/flat or three-dimensional/solid and explain the reasoning used.	
K.G.4 Analyze and compare two- and three-dimensional shapes of different sizes and orientations using informal language.	
K.G.5 Draw two-dimensional shapes (i.e., square, rectangle, triangle, hexagon, and circle) and create models of three-dimensional shapes (i.e., cone, cube, cylinder, and sphere).	
K.MDA.1 Identify measurable attributes (length, weight) of an object.	Adopt a Tree Birds & Bugs Bursting Buds Here We Grow Again
K.MDA.2 Compare objects using words such as shorter/longer, shorter/taller, and lighter/heavier.	Adopt a Tree Birds & Bugs Bursting Buds Here We Grow Again
K.MDA.3 Sort and classify data into 2 or 3 categories with data not to exceed 20 items in each category.	Birds & Bugs Every Tree for Itself Have Seeds will Travel Trees as Habitat
K.MDA.4 Represent data using object and picture graphs and draw conclusions from the graphs.	Birds & Bugs Discover Diversity Every Tree for Itself Have Seeds will Travel Here We Grow Again Trees as Habitat

Kindergarten Reverse Correlations – Mathematics

PLT Activity	Mathematics Standards
Adopt a Tree	K.G.2, K.MDA.1, K.MDA.2
Backyard Safari	K.NS.3, K.NS.4, K.NS.5, K.ATO.2, K.G.1
Birds and Bugs	K.NS.3, K.NS.4, K.NS.5, K.NS.9, K.NSBT.1, K.MDA.1, K.MDA.2, K.MDA.3, K.MDA.4
Bursting Buds	K.MDA.1, K.MDA.2
Have Seeds Will Travel	K.MDA.3, K.MDA.4
Here We Grow Again	K.MDA.1, K.MDA.2, K.MDA.4
Trees as Habitats	K.G.1, K.MDA3, K.MDA.4

Discover Diversity	K.NS.5, K.ATO.2, K.MDA.4
Every Tree for Itself	K.NS.4, K.NS.5, K.NS.6, K.NSBT.1, K.MDA.3, K.MDA.4
Fallen Log	K.G.1
Tree Cookies	K.NS.5

Kindergarten ELA Standards Correlation to PLT Activities

	Standards	PLT Activities
INQUIRY	Standard 1: Formulate relevant, self-generated questions based on interests and/or needs that can be investigated.	We all Need Trees
	Standard 2: Transact with texts to formulate questions, propose explanations, and consider alternative views and multiple perspectives.	
	Standard 3: Construct knowledge, applying disciplinary concepts and tools, to build deeper understanding of the world through exploration, collaboration, and analysis.	We all Need Trees
	Standard 4: Synthesize integrated information to share learning and/or take action.	
	Standard 5: Reflect throughout the inquiry process to assess metacognition, broaden understanding, and guide actions, both individually and collaboratively.	

	Standards	PLT Activities
READING: LITERARY TEXT	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	A Tree's Life
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.	
	Standard 6: Summarize key details and ideas to support analysis of thematic development.	
	Standard 7: Analyze the relationship among ideas, themes, or topics in multiple media, formats, and in visual, auditory, and kinesthetic modalities.	
	Standard 8: Analyze characters, settings, events, and ideas as they develop and interact within a particular context.	
	Standard 9: Interpret and analyze the author's use of words, phrases, and conventions, and how their relationships shape meaning and tone in print and multimedia texts.	
	Standard 10: Apply a range of strategies to determine and deepen the meaning of known, unknown, and multiple-meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	
	Standard 11: Analyze and provide evidence of how the author's choice of point of view, perspective, and purpose shape content, meaning, and style.	
	Standard 12: Analyze and critique how the author uses structures in print and multimedia texts to shape meaning and impact the reader.	
	Standard 13: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

	Standards	PLT Activities
READING: INFORMATIONAL TEXT	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	A Tree's Life
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence and investigating multiple interpretations.	Web of Life
	Standard 6: Summarize key details and ideas to support analysis of central ideas.	
	Standard 7: Research events, topics, ideas, or concepts through multiple media, formats, and in visual, auditory, and kinesthetic modalities.	Trees as Habitats Web of Life
	Standard 8: Interpret and analyze the author's use of words, phrases, text features, conventions, and structures, and how their relationships shape meaning and tone in print and multimedia texts.	
	Standard 9: Apply a range of strategies to determine the meaning of known, unknown, and multiple meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	
	Standard 10: Analyze and provide evidence of how the author's choice of purpose and perspective shapes content, meaning, and style.	
	Standard 11: Analyze and critique how the author uses structures in print and multimedia texts to craft informational and argument writing.	
	Standard 12: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

	Standards	PLT Activities
WRITING	Standard 1: Write arguments to support claims with clear reasons and relevant evidence.	
	Standard 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	Adopt a Tree The Closer You Look
	Standard 3: Write narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences.	The Closer You Look
	Standard 4: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	Adopt a Tree The Closer You Look
	Standard 5: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	Adopt a Tree The Closer You Look
	Standard 6: Write independently, legibly, and routinely for a variety of tasks, purposes, and audiences over short and extended time frames.	Adopt a Tree The Closer You Look

	Standards	PLT Activities
COMMUNICATION	Standard 1: Interact with others to explore ideas and concepts, communicate meaning, and develop logical interpretations through collaborative conversations; build upon the ideas of others to clearly express one's own views while respecting diverse perspectives.	Backyard Safari Have Seeds Will Travel Peppermint Beetle Signs of Fall (A) Trees as Habitats We all Need Trees

		Tree Cookies (V) Web of Life
	Standard 2: Articulate ideas, claims, and perspectives in a logical sequence using information, findings, and credible evidence from sources.	Did You Notice Tree Cookies (V) Web of Life
	Standard 3: Communicate information through strategic use of multiple modalities and multimedia to enrich understanding when presenting ideas and information.	Adopt a Tree Did You Notice Peppermint Beetle(E) The Closer You Look Web of Life
	Standard 4: Critique how a speaker addresses content and uses craft techniques that stylistically and structurally inform, engage, and impact audience and convey messages.	
	Standard 5: Incorporate craft techniques to engage and impact audience and convey messages.	

(V) Variation K-2 (E) Enrichment

Kindergarten Reverse Correlations – English Language Arts

PLT Activity	ELA Standard
A Tree's Life	K.RL.2, K.RI.2
Adopt a Tree	K.W.2, K.W.4, K.W.5, K.W.6, K.C.3,
Backyard Safari	K.C.1
Did You Notice	K.C.2, K.C.3
Have Seeds Will Travel	K.C.1
Peppermint Beetle	K.C.1, K.C.3
The Closer You Look	K.W.2, K.W.3, K.W.4, K.W.5, K.W.6, K.C.3
Trees as Habitats	K.RI.7, K.C.1
We All Need Trees	K.I.1, K.I.3, K.C.1
Signs of Fall (A)	K.C.1
Tree Cookies (V)	K.C.1, K.C.2
Web of Life	K.RI.5, K.RI.7, K.C.1, K.C.2, K.C.3

Kindergarten Social Studies Standards Correlation to PLT Activities

Standards	PLT Activities
Standard 1: Utilize the college and career skills of a historian to study continuity and change over time for one's personal history and one's community.	
K.H.1 Identify similarities and differences between oneself and others.	
K.H.2 Examine ways in which individuals change or stay the same over time.	A Tree's Life Did You Notice Tree Cookies
K.H.3 Identify different forms of evidence used in historical inquiry, such as digital sources, maps, photographs/images, or texts.	

Standard 2: Utilize the college and career skills of a geographer to apply map skills and draw conclusions about place in one's personal community.	
K.G.1 Identify a map, various map features, and explain the purpose of maps.	
K.G.2 Utilize sources of geographic information (e.g., digital sources, maps, or photographs/images) to define and identify cultural and/or natural features.	
K.G.3 Describe and compare the cultural and natural environment around one's home and school by constructing a visual representation.	Adopt a Tree
Standard 3: Utilize the college and career skills of an economist to understand how economic decisions affect one's personal community.	
K.E.1 Identify and compare wants and needs.	
K.E.2 Explain how wants and needs change over time.	
K.E.3 Explain why people have jobs and describe the economic benefits for self and community.	My Green Future
K.E.4 Identify an economic want or need at one's school or community level and create a solution.	We All Need Trees
Standard 4: Utilize the college and career skills of a political scientist to understand and display civic dispositions in one's personal community.	
K.CG.1 Identify similarities and differences between people and discuss ways to protect and respect all people by practicing civic dispositions.	
K.CG.2 Explain the purpose of rules and laws and discuss consequences of breaking them.	
K.CG.3 Establish and practice classroom rules and procedures for listening and responding appropriately to others.	
K.CG.4 Collaborate with others to identify a classroom or school issue and propose a resolution using civic dispositions.	

Kindergarten Reverse Correlations – Social Studies

PLT Activity	Social Studies Standard
A Tree's Life	K.H.2
Adopt a Tree	K.G.3
Did You Notice	K.H.2
We All Need Trees	K.E.4
My Green Future	K.E.3
Tree Cookies	K.H.2

GRADE ONE STANDARDS

Grade 1 Science Performance Expectations Correlation to PLT Activities

Performance Expectations	PLT Activities
1-PS4-1. Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	
1-PS4-2. Make observations to support an evidence-based claim that objects in darkness can be seen only when illuminated by light sources.	
1-PS4-3. Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light.	
1-PS4-4. Use tools and materials to design and build a device that uses light or sound to communicate over a distance	
1-LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	A Tree's Life Bursting Buds Have Seeds will Travel Here We Grow Again Make Your Own Paper The Closer You Look We All Need Trees Tree Factory
1-LS1-2. Obtain information from multiple sources to determine patterns in parent and offspring behavior that help offspring survive.	
1-LS3-1. Make observations to support an evidence-based claim that most young are like, but not exactly like, their parents.	A Tree's Life Adopt a Tree Did You Notice?
1-ESS1-1. Use observations of the sun, moon, and stars to describe patterns that can be predicted	
1-ESS1-2. Make observations at different times of year to relate the amount of daylight to the time of year.	

Grade 1 Reverse Correlations – Science

PLT Activity	Science Performance Expectations
A Tree's Life	1-LS1-1 1-LS3-1
Adopt a Tree	1-LS3-1
Bursting Buds	1-LS1-1
Did You Notice?	1-LS3-1
Have Seeds, Will Travel	1-LS1-1

Here We Grow Again	1-LS1-1
Make Your Own Paper	1-LS1-1 (ETS2-B)
The Closer You Look	1-LS1-1
We All Need Trees	1-LS1-1 (ETS2-B)
Tree Factory	1-LS1-1

Grade 1 Mathematics Standards Correlation to PLT Activities

Standards	PLT Activities
1.NSBT.1 Extend the number sequence to: a. count forward by ones to 120 starting at any number; b. count by fives and tens to 100, starting at any number; c. read, write and represent numbers to 100 using concrete models, standard form, and equations in expanded form; d. read and write in word form numbers zero through nineteen, and multiples of ten through ninety.	Backyard Safari Birds & Bugs Discover Diversity Every Tree for Itself Have Seeds Will Travel Tree Cookies
1.NSBT.2 Understand place value through 99 by demonstrating that: a. ten ones can be thought of as a bundle (group) called a "ten"; b. the tens digit in a two-digit number represents the number of tens and the ones digit represents the number of ones; c. two-digit numbers can be decomposed in a variety of ways (e.g., 52 can be decomposed as 5 tens and 2 ones or 4 tens and 12 ones, etc.) and record the decomposition as an equation.	
1.NSBT.3 Compare two two-digit numbers based on the meanings of the tens and ones digits, using the words greater than, equal to, or less than.	
1.NSBT.4 Add through 99 using concrete models, drawings, and strategies based on place value to: a. add a two-digit number and a one-digit number, understanding that sometimes it is necessary to compose a ten (reg	
1.NSBT.5 Determine the number that is 10 more or 10 less than a given number through 99 and explain the reasoning verbally and with multiple representations, including concrete models.	
1.NSBT.6 Subtract a multiple of 10 from a larger multiple of 10, both in the range 10 to 90, using concrete models, drawings, and strategies based on place value.	
1.ATO.1 Solve real-world/story problems using addition (as a joining action and as a partpart-whole action) and subtraction (as a separation action, finding parts of the whole, and as a comparison) through 20 with unknowns in all positions.	
1.ATO.2 Solve real-world/story problems that include three whole number addends whose sum is less than or equal to 20.	
1.ATO.3 Apply Commutative and Associative Properties of Addition to find the sum (through 20) of two or three addends.	
1.ATO.4 Understand subtraction as an unknown addend problem.	
1.ATO.5 Recognize how counting relates to addition and subtraction	Backyard Safari Birds & Bugs Have Seeds Will Travel
1.ATO.6 Demonstrate: a. addition and subtraction through 20; b. fluency with addition and related subtraction facts through 10.	
1.ATO.7 Understand the meaning of the equal sign as a relationship between two quantities (sameness) and determine if equations involving addition and subtraction are true	
1.ATO.8 Determine the missing number in addition and subtraction equations within 20.	

1.ATO.9 Create, extend and explain using pictures and words for: a. repeating patterns (e.g., AB, AAB, ABB, and ABC type patterns); b. growing patterns (between 2 and 4 terms/figures).	
1.G.1 Distinguish between a two-dimensional shape's defining (e.g., number of sides) and non-defining attributes (e.g., color).	
1.G.2 Combine two-dimensional shapes (i.e., square, rectangle, triangle, hexagon, rhombus, and trapezoid) or three-dimensional shapes (i.e., cube, rectangular prism, cone, and cylinder) in more than one way to form a composite shape.	
1.G.3 Partition two-dimensional shapes (i.e., square, rectangle, circle) into two or four equal parts.	
1.G.4 Identify and name two-dimensional shapes (i.e., square, rectangle, triangle, hexagon, rhombus, trapezoid, and circle).	
1.MDA.1 Order three objects by length using indirect comparison.	Bursting Buds
1.MDA.2 Use nonstandard physical models to show the length of an object as the number of same size units of length with no gaps or overlaps.	Adopt a Tree Here We Grow Again
1.MDA.3 Use analog and digital clocks to tell and record time to the hour and half hour.	
1.MDA.4 Collect, organize, and represent data with up to 3 categories using object graphs, picture graphs, t-charts and tallies.	Birds & Bugs Bursting Buds Discover Diversity Every Tree for Itself Here We Grow Again Have Seeds Will Travel
1.MDA.5 Draw conclusions from given object graphs, picture graphs, t-charts, tallies, and bar graphs.	Birds & Bugs Bursting Buds Every Tree for Itself Discover Diversity Have Seeds Will Travel
1.MDA.6 Identify a penny, nickel, dime and quarter and write the coin values using a ¢ symbol.	

Grade 1 Reverse Correlations – Mathematics

PLT Activity	Mathematics Standards
Adopt a Tree	1.MDA.2
Backyard Safari	1.NSBT.1, 1.ATO.5
Birds & Bugs	1.NSBT.1, 1.ATO.5, 1.MDA.4, 1.MDA.5,
Bursting Buds	1.MDA.1, 1.MDA.4, 1.MDA.5
Have Seeds Will Travel	1.NSBT.1, 1.ATO.5, 1.MDA.4, 1.MDA.5
Here We Grow Again	1.MDA.2, 1.MDA.4
Discover Diversity	1.NSBT.1, 1.MDA.4, 1.MDA.5
Every Tree for Itself	1.NSBT.1, 1.MDA.4, 1.MDA.5
Tree Cookies	1.NSBT.1

Grade 1 ELA Standards Correlation to PLT Activities

	Standards	PLT Activities
INQUIRY	Standard 1: Formulate relevant, self-generated questions based on interests and/or needs that can be investigated.	We all Need Trees
	Standard 2: Transact with texts to formulate questions, propose explanations, and consider alternative views and multiple perspectives.	
	Standard 3: Construct knowledge, applying disciplinary concepts and tools, to build deeper understanding of the world through exploration, collaboration, and analysis.	We all Need Trees
	Standard 4: Synthesize integrated information to share learning and/or take action.	
	Standard 5: Reflect throughout the inquiry process to assess metacognition, broaden understanding, and guide actions, both individually and collaboratively.	

	Standards	PLT Activities
LITERACY TEXT	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	A Tree's Life
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.	
	Standard 6: Summarize key details and ideas to support analysis of thematic development.	
	Standard 7: Analyze the relationship among ideas, themes, or topics in multiple media, formats, and in visual, auditory, and kinesthetic modalities.	
	Standard 8: Analyze characters, settings, events, and ideas as they develop and interact within a particular context.	
	Standard 9: Interpret and analyze the author's use of words, phrases, and conventions, and how their relationships shape meaning and tone in print and multimedia texts.	
	Standard 10: Apply a range of strategies to determine and deepen the meaning of known, unknown, and multiple-meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	
	Standard 11: Analyze and provide evidence of how the author's choice of point of view, perspective, and purpose shape content, meaning, and style.	
	Standard 12: Analyze and critique how the author uses structures in print and multimedia texts to shape meaning and impact the reader.	
	Standard 13: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

	Standards	PLT Activities
INFORMATIONAL TEXT	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	A Tree's Life
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing,	Web of Life

	synthesizing, providing evidence and investigating multiple interpretations.	
	Standard 6: Summarize key details and ideas to support analysis of central ideas.	
	Standard 7: Research events, topics, ideas, or concepts through multiple media, formats, and in visual, auditory, and kinesthetic modalities.	Trees as Habitats Web of Life
	Standard 8: Interpret and analyze the author's use of words, phrases, text features, conventions, and structures, and how their relationships shape meaning and tone in print and multimedia texts.	
	Standard 9: Apply a range of strategies to determine the meaning of known, unknown, and multiple meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	
	Standard 10: Analyze and provide evidence of how the author's choice of purpose and perspective shapes content, meaning, and style.	
	Standard 11: Analyze and critique how the author uses structures in print and multimedia texts to craft informational and argument writing.	
	Standard 12: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

	Standards	**PLT Activities**
WRITING	Standard 1: Write arguments to support claims with clear reasons and relevant evidence.	
	Standard 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	Adopt a Tree The Closer You Look
	Standard 3: Write narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well structured event sequences.	The Closer You Look
	Standard 4: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	Adopt a Tree The Closer You Look
	Standard 5: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	Adopt a Tree The Closer You Look
	Standard 6: Write independently, legibly, and routinely for a variety of tasks, purposes, and audiences over short and extended time frames.	Adopt a Tree The Closer You Look

	Standards	**PLT Activities**
COMMUNICATION	Standard 1: Interact with others to explore ideas and concepts, communicate meaning, and develop logical interpretations through collaborative conversations; build upon the ideas of others to clearly express one's own views while respecting diverse perspectives.	Backyard Safari Have Seeds Will Travel Peppermint Beetle Signs of Fall (A) Trees as Habitats Tree Cookies Web of Life We all Need Trees
	Standard 2: Articulate ideas, claims, and perspectives in a logical sequence using information, findings, and credible evidence from sources.	Did You Notice Tree Cookies Web of Life
	Standard 3: Communicate information through strategic use of multiple modalities and multimedia to enrich understanding when presenting ideas and information.	Adopt a Tree Did You Notice Peppermint Beetle(E)

		The Closer You Look Web of Life
	Standard 4: Critique how a speaker addresses content and uses craft techniques that stylistically and structurally inform, engage, and impact audience and convey messages.	
	Standard 5: Incorporate craft techniques to engage and impact audience and convey messages.	

Grade 1 Reverse Correlations – English Language Arts

PLT Activity	ELA Standard
A Tree's Life	1.RL.2, 1.RI.2
Adopt a Tree	1.W.2, 1.W.4, 1.W.5, 1.W.6, 1.C.3,
Backyard Safari	1.C.1
Did You Notice	1.C.2, 1.C.3
Have Seeds Will Travel	1.C.1
Peppermint Beetle	1.C.1, 1.C.3
The Closer You Look	1.W.2, 1.W.3, 1.W.4, 1.W.5, 1.W.6, 1.C.3
Trees as Habitats	1.RI.7, 1.C.1
We All Need Trees	1.I.1, 1.I.3, 1.C.1
Signs of Fall	1.C.1
Tree Cookies	1.C.1, 1.C.2
Web of Life	1.RI.5, 1.RI.7, 1.C.1, 1.C.2, 1.C.3

Grade 1 Social Studies Standards Correlation to PLT Activities

Standards	PLT Activities
Standard 1: Utilize the college and career skills of a historian to study continuity and change over time in South Carolina.	
1.H.1 Identify similarities and differences between one's community and other South Carolina communities over time.	
1.H.2 Analyze a current event in South Carolina and make predictions about possible outcomes.	We All Need Trees
1.H.3 Evaluate different sources of evidence used in historical inquiry, such as art, artifacts, digital sources, graphs, maps, oral histories, photographs/images, and texts.	
Standard 2: Utilize the college and career skills of a geographer to apply map skills and draw conclusions about places in South Carolina and South Carolina's place in the surrounding region.	
1.G.1 Identify various types of maps, map features, and the purpose of maps.	
1.G.2 Identify and describe the geographic location of South Carolina in relation to the rest of the United States through the use of various maps and geographic tools	
1.G.3 Identify and differentiate between rural, suburban, and urban areas within South Carolina.	
1.G.4 Describe and compare various landforms within South Carolina through the use of primary and secondary sources.	

Standard 3: Utilize the college and career skills of an economist to understand how economic decisions affect South Carolinians.	
1.E.1 Compare goods and services in the school, community, and state.	
1.E.2 Explain how goods and services change over time.	
1.E.3 Research and describe how goods and services differ in rural, suburban, and urban areas in South Carolina.	
1.E.4 Identify an economic want or need at the local or state level and create a solution in the form of a good or a service.	We All Need Trees My Green Future
Standard 4: Utilize the college and career skills of a political scientist to understand and display civic dispositions about contemporary South Carolina.	
1.CG.1 Demonstrate how civic dispositions encourage citizens with diverse beliefs and backgrounds to work together for a common goal.	
1.CG.2 Describe the basic purpose, structure, and functions of South Carolina's government at both the local and state level.	
1.CG.3 Demonstrate ways to display active and responsible citizenship in local and state government.	
1.CG.4 Collaborate with others to identify, resolve, and communicate resolutions on a local or state issue.	

Grade 1 Reverse Correlations – Social Studies

PLT Activity	Social Studies Standard
We All Need Trees	1.H.2, 1.E.4
My Green Future	1.E.4

GRADE TWO STANDARDS

Grade 2 Science Performance Expectations Correlation to PLT Activities

Performance Expectations	PLT Activities	
2-PS1-1. Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.		
2-PS1-2. Analyze data obtained from tests to determine which materials have the best properties for an intended purpose.		
2-PS1-3. Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.		
2-PS1-4. Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.		
2-LS2-1. Plan and conduct an investigation to determine what plants need to grow.	Here We Grow Again* Tree Cookies	Tree Factory Every Tree for Itself
2-LS2-2. Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.	Have Seeds Will Travel*	
2-LS4-1. Make observations of plants and animals to compare patterns of diversity within different habitats.	Backyard Safari* Birds and bugs Trees as Habitats	Discover Diversity
2-ESS1-1. Use information from several sources to provide evidence that Earth events can occur rapidly or slowly.		
2-ESS2-1. Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.		
2-ESS2-2. Develop a model to represent the shapes and kinds of land and bodies of water in an area		
2-ESS2-3. Obtain information to identify where water is found on Earth and that it can be solid or liquid.		
2-ESS3-1. Design solutions to address human impacts on natural resources in the local environment. (ETS2.B)	Make Your Own Paper We All Need Trees	

* Fully addresses the Performance Expectation

Grade 2 Reverse Correlations – Science

PLT Activity	Science Performance Expectations
Backyard Safari*	2-LS4-1
Birds and Bugs	2-LS4-1

Have Seeds, Will Travel*	2-LS2-2
Here We Grow Again*	2-LS2-1
Make Your Own Paper	2-ESS3-1 (ETS2.B)
Trees as Habitats	2-LS4-1
We All Need Trees	2-ESS3-1 (ETS2.B)
Discover Diversity	2-LS4-1
Tree Cookies	2-LS2-1
Tree Factory	2-LS2-1
Every Tree for Itself	2-LS2-1

* Fully addresses the Performance Expectation

Grade 2 Mathematics Standards Correlation to PLT Activities

Standards	PLT Activities
2.NSBT.1 Understand place value through 999 by demonstrating that: a. 100 can be thought of as a bundle (group) of 10 tens called a "hundred"; b. the hundreds digit in a three-digit number represents the number of hundreds, the tens digit represents the number of tens, and the ones digit represents the number of ones; c. three-digit numbers can be decomposed in multiple ways (e.g., 524 can be decomposed as 5 hundreds, 2 tens and 4 ones or 4 hundreds, 12 tens, and 4 ones, etc.).	
2.NSBT.2 Count by tens and hundreds to 1,000 starting with any number.	
2.NSBT.3 Read, write and represent numbers through 999 using concrete models, standard form, and equations in expanded form.	
2.NSBT.4 Compare two numbers with up to three digits using words and symbols (i.e., >, =, or <).	
2.NSBT.5 Add and subtract fluently through 99 using knowledge of place value and properties of operations.	
2.NSBT.6 Add up to four two-digit numbers using strategies based on knowledge of place value and properties of operations.	
2.NSBT.7 Add and subtract through 999 using concrete models, drawings, and symbols which convey strategies connected to place value understanding.	
2.NSBT.8 Determine the number that is 10 or 100 more or less than a given number through 1,000 and explain the reasoning verbally and in writing.	
2.ATO.1 Solve one- and two-step real-world/story problems using addition (as a joining action and as a part-part-whole action) and subtraction (as a separation action, finding parts of the whole, and as a comparison) through 99 with unknowns in all positions.	Backyard Safari Birds and Bugs Have Seeds Will Travel
2.ATO.2 Demonstrate fluency with addition and related subtraction facts through 20.	
2.ATO.3 Determine whether a number through 20 is odd or even using pairings of objects, counting by twos, or finding two equal addends to represent the number	
2.ATO.4 Use repeated addition to find the total number of objects arranged in a rectangular array with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	
2.G.1 Identify triangles, quadrilaterals, hexagons, and cubes. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.	
2.G.2 Partition a rectangle into rows and columns of same-size squares to form an array and count to find the total number of parts	
2.G.3 Partition squares, rectangles and circles into two or four equal parts, and describe the parts using the words halves, fourths, a half of, and a fourth of. Understand that when partitioning a square, rectangle or circle into two or four equal parts, the parts become smaller as the number of parts increases.	

2.MDA.1 Select and use appropriate tools (e.g., rulers, yardsticks, meter sticks, measuring tapes) to measure the length of an object.	Adopt a Tree Bursting buds Discover Diversity Here We Grow Again
2.MDA.2 Measure the same object or distance using a standard unit of one length and then a standard unit of a different length and explain verbally and in writing how and why the measurements differ.	Adopt a Tree Bursting Buds Discover Diversity Here We Grow Again
2.MDA.3 Estimate and measure length/distance in customary units (i.e., inch, foot, yard) and metric units (i.e., centimeter, meter).	Adopt a Tree Bursting Buds Discover Diversity Here We Grow Again
2.MDA.4 Measure to determine how much longer one object is than another, using standard length units.	Adopt a Tree Bursting Buds Discover Diversity Here We Grow Again
2.MDA.5 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, …, and represent whole-number sums and differences through 99 on a number line diagram.	
2.MDA.6 Use analog and digital clocks to tell and record time to the nearest five-minute interval using a.m. and p.m.	
2.MDA.7 Solve real-world/story problems involving dollar bills using the $ symbol or involving quarters, dimes, nickels, and pennies using the ¢ symbol.	
2.MDA.8 Generate data by measuring objects in whole unit lengths and organize the data in a line plot using a horizontal scale marked in whole number units.	Adopt a Tree Birds and Bugs Bursting Buds Discover Diversity Every Tree for Itself Here We Grow Again
2.MDA.9 Collect, organize, and represent data with up to four categories using picture graphs and bar graphs with a single-unit scale.	Birds and Bugs Discover Diversity Every Tree for Itself Have Seeds Will Travel Here We Grow Again
2.MDA.10 Draw conclusions from t-charts, object graphs, picture graphs, and bar graphs.	Birds and Bugs Discover Diversity Every Tree for Itself Have Seeds Will Travel Here We Grow Again

Grade 2 Reverse Correlations – Mathematics

PLT Activity	Mathematics Standards
Adopt a Tree	2.MDA.1, 2.MDA.2, 2.MDA.3, 2.MDA.4, 2.MDA.8
Backyard Safari	2.ATO.1
Birds & Bugs	2.ATO.1, 2.MDA.8, 2.MDA.9, 2.MDA.10
Bursting Buds	2.MDA.1, 2.MDA.2, 2.MDA.3, 2.MDA.4, 2.MDA.8,

Have Seeds Will Travel	2.ATO.1, 2.MDA.9, 2.MDA.10
Here We Grown Again	2.MDA.1, 2.MDA.2, 2.MDA.3, 2.MDA.4, 2.MDA.8, 2.MDA.9, 2.MDA.10
Discover Diversity	2.MDA.1, 2.MDA.2, 2.MDA.3, 2.MDA.4, 2.MDA.8, 2.MDA.9, 2.MDA.10
Every Tree for Itself	2.MDA.8, 2.MDA.9, 2.MDS.10

Grade 2 ELA Standards Correlation to PLT Activities

	Standards	PLT Activities
INQUIRY	Standard 1: Formulate relevant, self-generated questions based on interests and/or needs that can be investigated.	We all Need Trees
	Standard 2: Transact with texts to formulate questions, propose explanations, and consider alternative views and multiple perspectives.	
	Standard 3: Construct knowledge, applying disciplinary concepts and tools, to build deeper understanding of the world through exploration, collaboration, and analysis.	We all Need Trees
	Standard 4: Synthesize integrated information to share learning and/or take action.	
	Standard 5: Reflect throughout the inquiry process to assess metacognition, broaden understanding, and guide actions, both individually and collaboratively.	

	Standards	PLT Activities
READING: LITERARY TEXT	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	A Tree's Life
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.	
	Standard 6: Summarize key details and ideas to support analysis of thematic development.	
	Standard 7: Analyze the relationship among ideas, themes, or topics in multiple media, formats, and in visual, auditory, and kinesthetic modalities.	
	Standard 8: Analyze characters, settings, events, and ideas as they develop and interact within a particular context.	Trees for Many Reasons
	Standard 9: Interpret and analyze the author's use of words, phrases, and conventions, and how their relationships shape meaning and tone in print and multimedia texts.	
	Standard 10: Apply a range of strategies to determine and deepen the meaning of known, unknown, and multiple-meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	
	Standard 11: Analyze and provide evidence of how the author's choice of point of view, perspective, and purpose shape content, meaning, and style.	
	Standard 12: Analyze and critique how the author uses structures in print and multimedia texts to shape meaning and impact the reader.	
	Standard 13: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

	Standards	PLT Activities
READ	Standard 1: Demonstrate understanding of the organization and basic features of print.	

	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	A Tree's Life
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence and investigating multiple interpretations.	Web of Life
	Standard 6: Summarize key details and ideas to support analysis of central ideas.	
	Standard 7: Research events, topics, ideas, or concepts through multiple media, formats, and in visual, auditory, and kinesthetic modalities.	Trees as Habitats Web of Life
	Standard 8: Interpret and analyze the author's use of words, phrases, text features, conventions, and structures, and how their relationships shape meaning and tone in print and multimedia texts.	
	Standard 9: Apply a range of strategies to determine the meaning of known, unknown, and multiple meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	
	Standard 10: Analyze and provide evidence of how the author's choice of purpose and perspective shapes content, meaning, and style.	
	Standard 11: Analyze and critique how the author uses structures in print and multimedia texts to craft informational and argument writing.	
	Standard 12: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

WRITING	**Standards**	**PLT Activities**
	Standard 1: Write arguments to support claims with clear reasons and relevant evidence.	
	Standard 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	Adopt a Tree The Closer You Look
	Standard 3: Write narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences.	The Closer You Look
	Standard 4: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	Adopt a Tree The Closer You Look
	Standard 5: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	Adopt a Tree The Closer You Look
	Standard 6: Write independently, legibly, and routinely for a variety of tasks, purposes, and audiences over short and extended time frames.	Adopt a Tree The Closer You Look

COMMUNICATION	**Standards**	**PLT Activities**
	Standard 1: Interact with others to explore ideas and concepts, communicate meaning, and develop logical interpretations through collaborative conversations; build upon the ideas of others to clearly express one's own views while respecting diverse perspectives.	Backyard Safari Have Seeds Will Travel Peppermint Beetle Signs of Fall (A) Trees as Habitats Tree Cookies (V) Web of Life We all Need Trees

	Standard 2: Articulate ideas, claims, and perspectives in a logical sequence using information, findings, and credible evidence from sources.	Did You Notice Tree Cookies (V) Web of Life
	Standard 3: Communicate information through strategic use of multiple modalities and multimedia to enrich understanding when presenting ideas and information.	Adopt a Tree Did You Notice Peppermint Beetle(E) The Closer You Look Web of Life
	Standard 4: Critique how a speaker addresses content and uses craft techniques that stylistically and structurally inform, engage, and impact audience and convey messages.	
	Standard 5: Incorporate craft techniques to engage and impact audience and convey messages.	

(V) Variation K-2 (E) Enrichment

Grade 2 Reverse Correlations – English Language Arts

PLT Activity	ELA Standard
A Tree's Life	2.RL.2, 2.RI.2
Adopt a Tree	2.W.2, 2.W.4, 2.W.5, 2.W.6, 2.C.3,
Backyard Safari	2.C.1
Did You Notice	2.C.2, 2.C.3
Have Seeds Will Travel	2.C.1
Peppermint Beetle	2.C.1, 2.C.3
The Closer You Look	2.W.2, 2.W.3, 2.W.4, 2.W.5, 2.W.6, 2.C.3
Trees as Habitats	2.RI.7, 2.C.1
We All Need Trees	2.I.1, 2.I.3, 2.C.1
Signs of Fall (A)	2.C.1
Tree Cookies (V)	2.C.1, 2.C.2
Trees for Many Reasons	2.RL.8
Web of Life	2.RI.5, 2.RI.7, 2.C.1, 2.C.2, 2.C.3

Grade 2 Social Studies Standards Correlation to PLT Activities

Standards	PLT Activities
Standard 1: Utilize the college and career skills of a historian to study the continuity and changes over time in the United States.	
2.H.1 Identify and compare significant historical events, moments, and symbols in U.S. history.	
2.H.2 Examine current or past events from U.S. history, and discuss the possible causes and effects.	
2.H.3 Analyze patterns of continuities and changes within U.S. history through the use of a variety of sources, including graphic organizers, maps, oral histories, photographs/images, texts, and timelines.	
2.H.4 Evaluate different forms of evidence used in historical inquiry and determine their validity.	

Standard 2: Utilize the college and career skills of a geographer to apply map skills and draw conclusions about the United States.	
2.G.1 Identify the geographic location of the U. S. in relation to the rest of the world.	
2.G.2 Describe and compare various landforms over time within the U.S. through the use of primary and secondary sources	
2.G.2 Describe and compare various landforms over time within the U.S. through the use of primary and secondary sources	
2.G.3 Explain how the distribution of human features, physical features, and natural resources within the US changes over time and impacts economic activity.	We All Need Trees
Standard 3: Utilize the college and career skills of an economist to understand how economic decisions affect citizenship within the United States.	
2.E.1 Examine the purpose of currency and how income, savings, and spending are parts of a budget.	
2.E.2 Explain how budgets change as wants and needs or the availability of goods & services change.	
2.E.3 Create a simple budget, and articulate the priorities using economic terms such as expenses, income, and savings.	
2.E.4 Interpret data to show how geographic location and available resources impact economic decision-making.	
Standard 4: Responsible citizenship requires individuals of diverse cultural backgrounds to employ dispositions that promote strong relationships to develop solutions to communal problems.	
2.CG.1 Identify cultural and ethnic groups in the U. S., explore their characteristics, and communicate how civic dispositions build relationships between groups in a diverse society.	
2.CG.2 Use primary and secondary sources to research a national figure who demonstrated civic dispositions.	
2.CG.3 Analyze how rights are granted to U. S. citizens through the founding documents.	
2.CG.4 Use evidence to propose and communicate a resolution to a national issue.	

Grade 2 Reverse Correlations – Social Studies

PLT Activity	Social Studies Standard
We All Need Trees	2.G.3

GRADE THREE STANDARDS

Grade 3 Science Performance Expectations Correlation to PLT Activities

Performance Expectations	PLT Activities
3-PS2-1. Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.	
3-PS2-2. Make observations and measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.	
3-PS2-3. Ask questions to determine cause-and-effect relationships of electric interactions and magnetic interactions between two objects not in contact with each other.	
3-PS2-4. Develop possible solutions to a simple design problem by applying scientific ideas about magnets.	
3-LS1-1. Develop and use models to describe how organisms change in predictable patterns during their unique and diverse life cycles	A Tree's Life Bursting Buds (3-5 Variation #2) Did You Notice?
3-LS2-1. Construct an argument that some animals form groups that help members survive.	
3-LS3-1. Analyze and interpret data to provide evidence that plants and animals have inherited traits that vary within a group of similar organisms.	A Tree's Life Tree ID
3-LS3-2. Use evidence to support the explanation that traits can be influenced by the environment.	Here We Grow Again Charting biodiversity *Every Tree for Itself Tree Cookies Trees in Trouble Field, Forest, & Stream
3-LS4-1. Analyze and interpret data from fossils to provide evidence of organisms and the environments in which they lived long ago.	
3-LS4-2. Use evidence to construct an explanation for how the variations in traits among individuals of the same species may provide advantages in surviving and producing offspring	Birds and Bugs
3-LS4-3. Construct an argument with evidence that in a particular habitat some organisms can thrive, struggle to survive, or fail to survive.	Backyard Safari Trees as Habitats Charting Biodiversity Discover Diversity Field, Forest, & Stream Life on the Edge Nothing Succeeds Like Succession
3-LS4-4. Make a claim about the effectiveness of a solution to a problem caused when the environment changes and affects organisms living there.	Discover Diversity Trees in Trouble Water Wonders Decisions, Decisions *Field, Forest, & Stream Improve Your Place Life on the Edge Our Federal Forests Plant a Tree Reduce, Reuse, Recycle Nothing Succeeds Like Succession

3-ESS2-1. Represent data in tables and graphical displays of typical weather conditions during a particular season to identify patterns and make predictions.	
3-ESS2-2. Obtain and combine information to describe climate patterns in different regions of the world.	
3-ESS3-1. Make a claim about the effectiveness of a design solution that reduces the impacts of a weather related hazard.	

* Fully addresses the Performance Expectation

Grade 3 Reverse Correlations – Science

PLT Activity	Science Performance Expectation		
A Tree's Life	3-LS1-1	3-LS3-1	
Backyard Safari	3-LS4-3		
Birds and Bugs	3-LS4-2		
Bursting Buds (3-5 Variation #2)	3- LS1-1		
Did You Notice?	3-LS1-1		
Here We Grow Again	3LS3-2		
Trees as Habitats	3-LS4-3		
Charting Biodiversity	3-LS3-2	3-LS4-3	
Discover Diversity	3-LS4-3	3-LS4-4	
*Every Tree for Itself	3-LS3-2		
Tree Cookies	3-LS3-2		
Tree ID	3-LS3-1		
Trees in Trouble	3-LS4-4	3-LS3-2	
Water Wonders	3-LS4-4		
Decisions, Decisions	3-LS4-4		
*Field, Forest, and Stream	3-LS3-2	3-LS4-4	3-LS4-3*
Improve your Place	3-LS4-4		
Life on the Edge	3-LS4-3	3-LS4-4	
Nothing Succeeds Like Succession	3-LS4-3	3-LS4-4	
Our Federal Forests	3-LS4-4		
Plant a Tree	3-LS4-4		
Reduce, Reuse, Recycle	3-LS4-4		

* Fully addresses the Performance Expectation

Grade 3 Mathematics Standards Correlation to PLT Activities

Standards	PLT Activities
3.NSBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.	
3.NSBT.2 Add and subtract whole numbers fluently to 1,000 using knowledge of place value and properties of operations	Exploration Energy Soil Builders
3.NSBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10 – 90, using knowledge of place value and properties of operations	Get Outside
3.NSBT.4 Read and write numbers through 999,999 in standard form and equations in expanded form	
3.NSBT.5 Compare and order numbers through 999,999 and represent the comparison using the symbols >, =, or	
3.NSF.1 Develop an understanding of fractions (i.e., denominators 2, 3, 4, 6, 8, 10) as numbers. a. A fraction 1 b (called a unit fraction) is the quantity formed by one part when a whole is partitioned into b equal parts; b. A fraction a b is the quantity formed by a parts of size 1 b ; c. A fraction is a number that can be represented on a number line based on counts of a unit fraction; d. A fraction can be represented using set, area, and linear models.	
3.NSF.2 Explain fraction equivalence (i.e., denominators 2, 3, 4, 6, 8, 10) by demonstrating an understanding that: a. two fractions are equal if they are the same size, based on the same whole, or at the same point on a number line; b. fraction equivalence can be represented using set, area, and linear models; c. whole numbers can be written as fractions (e.g., 4 = 4 1 and 1 = 4 4); d. fractions with the same numerator or same denominator can be compared by reasoning about their size based on the same whole.	
3.NSF.3 Develop an understanding of mixed numbers (i.e., denominators 2, 3, 4, 6, 8, 10) as iterations of unit fractions on a number line.	
3.ATO.1 Use concrete objects, drawings and symbols to represent multiplication facts of two single-digit whole numbers and explain the relationship between the factors (i.e., 0 – 10) and the product.	
3.ATO.2 Use concrete objects, drawings and symbols to represent division without remainders and explain the relationship among the whole number quotient (i.e., 0 – 10), divisor (i.e., 0 – 10), and dividend.	
3.ATO.3 Solve real-world problems involving equal groups, area/array, and number line models using basic multiplication and related division facts. Represent the problem situation using an equation with a symbol for the unknown.	
3.ATO.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is a missing factor, product, dividend, divisor, or quotient.	
3.ATO.5 Apply properties of operations (i.e., Commutative Property of Multiplication, Associative Property of Multiplication, Distributive Property) as strategies to multiply and divide and explain the reasoning.	
3.ATO.6 Understand division as a missing factor problem	
3.ATO.7 Demonstrate fluency with basic multiplication and related division facts of products and dividends through 100.	
3.ATO.8 Solve two-step real-world problems using addition, subtraction, multiplication and division of whole numbers and having whole number answers. Represent these problems using equations with a letter for the unknown quantity.	
3.ATO.9 Identify a rule for an arithmetic pattern (e.g., patterns in the addition table or multiplication table).	
3.G.1 Understand that shapes in different categories (e.g., rhombus, rectangle, square, and other 4-sided shapes) may share attributes (e.g., 4-sided figures) and the shared attributes can define a larger category (e.g., quadrilateral). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	

3.G.2 Partition two-dimensional shapes into 2, 3, 4, 6, or 8 parts with equal areas and express the area of each part using the same unit fraction. Recognize that equal parts of identical wholes need not have the same shape.	
3.G.3 Use a right angle as a benchmark to identify and sketch acute and obtuse angles.	
3.G.4 Identify a three-dimensional shape (i.e., right rectangular prism, right triangular prism, pyramid) based on a given two-dimensional net and explain the relationship between the shape and the net.	
3.MDA.1 Use analog and digital clocks to determine and record time to the nearest minute, using a.m. and p.m.; measure time intervals in minutes; and solve problems involving addition and subtraction of time intervals within 60 minutes.	
3.MDA.2 Estimate and measure liquid volumes (capacity) in customary units (i.e., c., pt., qt., gal.) and metric units (i.e., mL, L) to the nearest whole unit.	
3.MDA.3 Collect, organize, classify, and interpret data with multiple categories and draw a scaled picture graph and a scaled bar graph to represent the data.	Adopt a Tree Birds & Bugs Have Seeds Will Travel Here We Grow Again Trees as Habitats Every Tree for Itself Get Outside Soil Builders Field, Forest, & Stream Reduce, Reuse, Recycle Our Federal Forests
3.MDA.4 Generate data by measuring length to the nearest inch, half-inch and quarter-inch and organize the data in a line plot using a horizontal scale marked off in appropriate units	Bursting Buds Here We Grow Again Soil Builders Tree Cookies Trees in Trouble Nature's Skyscrapers
3.MDA.5 Understand the concept of area measurement. a. Recognize area as an attribute of plane figures; b. Measure area by building arrays and counting standard unit squares; c. Determine the area of a rectilinear polygon and relate to multiplication and addition.	Here We Grow Again
3.MDA.6 Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	Discover Diversity

Grade 3 Reverse Correlations – Mathematics

PLT Activity	Mathematics Standard
Adopt a Tree	3MDA.3
Bird & Bugs	3.MDA.3
Bursting Buds	3.MDA.4
Have Seeds Will Travel	3.MDA.3
Here We Grow Again	3.MDA.3, 3.MDA.4, 3.MDA.5

Trees as Habitats	3.MDA.3
Discover Diversity	3.MDA.6
Every Tree for Itself	3.MDA.3
Get Outside	3.NSBT.3, 3.MDA.3
Soil Builders	3.NSBT.2, 3.MDA.3, 3.MDA.4
Tree Cookies	3.MDA.4
Trees in Trouble	3.MDA.4
Exploration Energy	3.NSBT.2
Field, Forest, & Stream	3.MDA.3
Nature's Skyscrapers	3.MDA.4
Reduce, Reuse, Recycle	3.MDA.3
Our Federal Forests	3.MDA.3

Grade 3 ELA Standards Correlation to PLT Activities

	Standards	PLT Activities
INQUIRY	Standard 1: Formulate relevant, self-generated questions based on interests and/or needs that can be investigated.	A Tree's Life (V) Adopt a Tree (V) Did You Notice (V) Every Drop Counts Fallen Log Tree Cookies Web of Life
	Standard 2: Transact with texts to formulate questions, propose explanations, and consider alternative views and multiple perspectives.	Trees for Many Reasons
	Standard 3: Construct knowledge, applying disciplinary concepts and tools, to build deeper understanding of the world through exploration, collaboration, and analysis.	A Tree's Life (V) Adopt a Tree (V) Did You Notice (V) Fallen Log Tree Cookies Energy Exploration (V)
	Standard 4: Synthesize integrated information to share learning and/or take action.	A Tree's Life (V) Backyard Safari (V) Did You Notice (V) Every Drop Counts Fallen Log Energy Exploration (V)
	Standard 5: Reflect throughout the inquiry process to assess metacognition, broaden understanding, and guide actions, both individually and collaboratively.	

READING:	Standards	PLT Activities
	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	

	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.	
	Standard 6: Summarize key details and ideas to support analysis of thematic development.	Trees for Many Reasons
	Standard 7: Analyze the relationship among ideas, themes, or topics in multiple media, formats, and in visual, auditory, and kinesthetic modalities.	
	Standard 8: Analyze characters, settings, events, and ideas as they develop and interact within a particular context.	Trees for Many Reasons
	Standard 9: Interpret and analyze the author's use of words, phrases, and conventions, and how their relationships shape meaning and tone in print and multimedia texts.	Trees for Many Reasons
	Standard 10: Apply a range of strategies to determine and deepen the meaning of known, unknown, and multiple-meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	
	Standard 11: Analyze and provide evidence of how the author's choice of point of view, perspective, and purpose shape content, meaning, and style.	Trees for Many Reasons
	Standard 12: Analyze and critique how the author uses structures in print and multimedia texts to shape meaning and impact the reader.	Trees for Many Reasons
	Standard 13: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

READING: INFORMATIONAL TEXT	**Standards**	**PLT Activities**
	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence and investigating multiple interpretations.	Nothing Succeeds like Succession (V)
	Standard 6: Summarize key details and ideas to support analysis of central ideas.	Did You Notice (V) Tree Cookies
	Standard 7: Research events, topics, ideas, or concepts through multiple media, formats, and in visual, auditory, and kinesthetic modalities.	A Tree's Life (V) Backyard Safari (V) Bursting Buds (V) Did You Notice (V) Peppermint Beetle (V) Charting Biodiversity Tree Cookies Web of Life

	Standard 8: Interpret and analyze the author's use of words, phrases, text features, conventions, and structures, and how their relationships shape meaning and tone in print and multimedia texts.	
	Standard 9: Apply a range of strategies to determine the meaning of known, unknown, and multiple meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	
	Standard 10: Analyze and provide evidence of how the author's choice of purpose and perspective shapes content, meaning, and style.	
	Standard 11: Analyze and critique how the author uses structures in print and multimedia texts to craft informational and argument writing.	
	Standard 12: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

	Standards	**PLT Activities**
WRITING	Standard 1: Write arguments to support claims with clear reasons and relevant evidence.	
	Standard 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	A Tree's Life (V) Bursting Buds (V) Tree Factory Tree ID Trees in Trouble Water Wonders Web of Life
	Standard 3: Write narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences.	A Tree's Life (V) Bursting Buds (V) Fallen Log Get Outside Water Wonders
	Standard 4: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	A Tree's Life (V) Bursting Buds (V) Fallen Log Get Outside Tree Factory Tree ID Trees in Trouble Water Wonders Web of Life
	Standard 5: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	A Tree's Life (V) Bursting Buds (V) Fallen Log Get Outside Tree Factory Tree ID Trees in Trouble Water Wonders Web of Life
	Standard 6: Write independently, legibly, and routinely for a variety of tasks, purposes, and audiences over short and extended time frames.	A Tree's Life (V) Bursting Buds (V) Fallen Log Get Outside

		Poet Tree Tree Factory Tree ID Trees in Trouble Water Wonders Web of Life

	Standards	**PLT Activities**
COMMUNICATION	Standard 1: Interact with others to explore ideas and concepts, communicate meaning, and develop logical interpretations through collaborative conversations; build upon the ideas of others to clearly express one's own views while respecting diverse perspectives.	Backyard Safari (V) Did You Notice (V) Have Seeds Will Travel (V) We All Need Trees (V) Charting Biodiversity Discover Diversity Fallen Log My Green Future Peek at Packaging Soil Builders Tree Cookies Trees for Many Reasons Our Federal Forests (V)
	Standard 2: Articulate ideas, claims, and perspectives in a logical sequence using information, findings, and credible evidence from sources.	A Tree's Life (V) Adopt a Tree (V) Backyard Safari (V) Did You Notice (V) Charting Biodiversity Discover Diversity Fallen Log Poet Tree Tree Cookies Energy Exploration (V)
	Standard 3: Communicate information through strategic use of multiple modalities and multimedia to enrich understanding when presenting ideas and information.	A Tree's Life (V) Adopt a Tree (V) Charting Biodiversity Discover Diversity Fallen Log My Green Future Poet Tree Soil Builders Water Wonders Energy Exploration (V) Our Federal Forests (V)
	Standard 4: Critique how a speaker addresses content and uses craft techniques that stylistically and structurally inform, engage, and impact audience and convey messages.	Poet Tree Soil Builders

	Standard 5: Incorporate craft techniques to engage and impact audience and convey messages.	Poet Tree

(V) Variation for 3-5

Grade 3 Reverse Correlations – English Language Arts

PLT Activity	Standard
A Tree's Life (V)	3.I.1, 3.I.3, 3.I.4, 3.RI.7, 3.W.2, 3.W.3, 3.W.4, 3.W.5, 3.W.6, 3.C.2, 3.C.3
Adopt a Tree (V)	3.I.1, 3.I.3, 3.C.2, 3.C.3
Backyard Safari (V)	3.I.4, 3.RI.7, 3.C.1, 3.C.2
Bursting Buds (V)	3.RI.7, 3.W.2, 3.W.3, 3.W.4, 3.W.5, 3.W.6
Did You Notice (V)	3.I.1, 3.I.3, 3.I.4, 3.RI.6, 3.RI.7, 3.C.1, 3.C.2,
Peppermint Beetle	3.RI.7
Have Seeds Will Travel (V)	3.C.1
We All Need Trees (V)	3.C.1
Charting Biodiversity	3.RI.7, 3.C.1, 3.C.2, 3.C.3
Discover Diversity	3.C.1, 3.C.2, 3.C.3
Every Drop Counts	3.I.1, 3.I.4
Fallen Log	3.I.1, 3.I.3, 3.I.4, 3.W.3, 3.W.4, 3.W.5, 3.W.6, 3.C.1, 3.C.2, 3.C.3
Get Outside	3.W.3, 3.W.4, 3.W.5, 3.W.6
My Green Future	3.C.1, 3.C.3
Peek at Packaging	3.C.1
Poet Tree	3.W.6, 3.C.2, 3.C.3, 3.C.4, 3.C.5
Soil Builders	3.C.1, 3.C.3, 3.C.4
Tree Cookies	3.I.1, 3.I.3, 3.RI.6, 3.RI.7, 3.C.1, 3.C.2,
Tree Factory	3.W.2, 3.W.4, 3.W.5, 3.W.6
Trees for Many Reasons	3.I.2, 3.RL.6, 3.RL.8, 3.RL.9, 3.RL.11, 3.RL.12, 3.C.1,
Tree ID	3.W.2, 3.W.4, 3.W.5, 3.W.6
Trees in Trouble	3.W.2, 3.W.4, 3.W.5, 3.W.6
Water Wonders	3.W.2, 3.W.3, 3.W.4, 3.W.5, 3.W.6, 3.C.3
Web of Life	3.I.1, 3.RI.7, 3.W.2, 3.W.4, 3.W.5, 3.W.6
Exploration Energy (V)	3.I.3, 3.I.4, 3.C.2, 3.C.3
Nothing Succeeds Like Succession (V)	3.RI.5
Our Federal Forests (V)	3.C.1, 3.C.3

Grade 3 Social Studies Standards Correlation to PLT Activities

Standards	PLT Activities
Standard 1: Use maps and globes to categorize places and regions by their human and physical conditions.	
3.1.1.AG Utilize an alphanumeric grid to locate the continents and oceans.	

3.1.2.AG Locate the world's four hemispheres (i.e., northern, southern, eastern, and western) by using the major components of latitude and longitude (i.e., the Equator, the Prime Meridian, lines of latitude (i.e., parallels), lines of longitude (i.e., meridians), and the International Date Line).	
3.1.3.PR Identify the spatial hierarchy of political and physical geographic features.	
Standard 2: Demonstrate an understanding of Earth's physical features and ecosystems that affect human activities.	
3.2.1.ER Recognize and explain how physical features are distributed around the world.	
3.2.2.ER Identify and analyze the ways people interact with the physical environment in different regions of the state, the country, and the world.	
3.2.3.ER Identify spatial variations in climates around the world and recognize the relationship between climate and human activities.	The Global Climate
Standard 3: Demonstrate an understanding of the relationship between Earth's environmental hazards and human activities.	
3.3.1.ER Identify the range of natural hazards facing people and explain how some populations are more vulnerable than others.	
3.3.2.ER Use maps and other sources of geographic information to gather evidence and draw conclusions about patterns of natural disasters around the world.	
3.3.3.AG Develop a natural disaster safety plan for a community.	
Standard 4: Demonstrate an understanding of varied human cultural and economic characteristics across Earth's surface.	
3.4.1.PR Investigate the cultural characteristics of places and regions around the world.	
3.4.2.HS Investigate the economic and land use characteristics of places and regions around the world.	Decisions, Decisions
3.4.3.AG Research and create a geographic representation of a contemporary or historic group of people to communicate findings about their cultural characteristics and livelihoods.	
Standard 5: Demonstrate an understanding of how and why humans have explored and migrated across Earth.	
3.5.1.HS Investigate and explain the economic, social, and political motivations behind human exploration of Earth.	
3.5.2.AG Use maps and other geographic representations to identify exploration patterns throughout Earth history.	
3.5.3.HS Investigate and explain the economic, social, political, and environmental motivations behind human migration and how places can change as a result.	
3.5.4.AG Use maps and other geographic representations to identify how migration patterns affect people and places.	

Grade 3 Reverse Correlations – Social Studies

PLT Activity	Social Studies Standard
Decisions, Decisions	3.4.2.HS
The Global Climate	3.2.3.ER

GRADE FOUR STANDARDS

Grade 4 Science Performance Expectations Correlation to PLT Activities

Performance Expectations	PLT Activities
4-PS3-1. Use evidence to construct an explanation relating the speed of an object to the energy of that object.	
4-PS3-2. Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.	
4-PS3-3. Ask questions and predict outcomes about the changes in energy that occur when objects collide.	
4-PS3-4. Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.	
4-PS4-1. Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move.	
4-PS4-2. Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen.	
4-PS4-3. Generate and compare multiple solutions that use patterns to transmit information.	
4-LS1-1. Construct an argument that plants and animals have internal and external structures that function together in a system to support survival, growth, behavior, and reproduction.	Bursting Buds Have Seeds Will Travel Tree Factory Tree ID
4-LS1-2. Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.	Peppermint Beetle Get Outside
4-ESS1-1. Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.	
4-ESS2-1. Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.	
4-ESS2-2. Analyze and interpret data from maps to describe patterns of Earth's features	
4-ESS3-1. Obtain and combine information to describe that energy and fuels are derived from natural resources and how their uses affect the environment.	Trees for Many Reasons Exploration Energy Renewable or Not
4-ESS3-2. Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.	Did You Notice? Decisions, Decisions Tree Cookies Exploration Energy Water Wonders

Grade 4 Reverse Correlations – Science

PLT Activity	Science Performance Expectations
Bursting Buds	4-LS1-1
Did You Notice?	4-ESS3-2
Have Seeds Will Travel	4-LS1-1
Peppermint Beetle	4-LS1-2
Get Outside	4-LS1-2
Tree Cookies	4-ESS3-2
Tree Factory	4-LS1-1
Tree ID	4-LS1-1
Trees for Many Reasons	4-ESS3-1
Water Wonders	4-ESS3-2
Decisions, Decisions	4-ESS3-2
Exploration Energy	4-ESS3-1 4-ESS3-2
Renewable or Not?	4-ESS3-1

Grade 4 Mathematics Standards Correlation to PLT Activities

Standards	PLT Activities
4.NSBT.1 Understand that, in a multi-digit whole number, a digit represents ten times what the same digit represents in the place to its right.	
4.NSBT.2 Recognize math periods and number patterns within each period to read and write in standard form large numbers through 999,999,999.	
4.NSBT.3 Use rounding as one form of estimation and round whole numbers to any given place value.	
4.NSBT.4 Fluently add and subtract multi-digit whole numbers using strategies to include a standard algorithm.	Discover Diversity Exploration Energy Reduce, Reuse, Recycle Soil Builders
4.NSBT.5 Multiply up to a four-digit number by a one-digit number and multiply a two-digit number by a two-digit number using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using rectangular arrays, area models and/or equations.	Get Outside Reduce, Reuse, Recycle
4.NSBT.6 Divide up to a four-digit dividend by a one-digit divisor using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division.	
4.NSF.1 Explain why a fraction (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, 25, 100), $a\ b$, is equivalent to a fraction, $n\times a\ n\times b$, by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.	
4.NSF.2 Compare two given fractions (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, 25, 100) by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1 2 and represent the comparison using the symbols >, =, or	
4.NSF.3 Develop an understanding of addition and subtraction of fractions (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, 25, 100) based on unit fractions. a. Compose and decompose a fraction in more than one way, recording each composition and decomposition as an addition or subtraction equation; b. Add and subtract mixed numbers with like denominators; c. Solve real-world problems involving addition and subtraction of fractions referring to the same whole and having like denominators.	

4.NSF.4 Apply and extend an understanding of multiplication by multiplying a whole number and a fraction (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, 25, 100). a. Understand a fraction $a\ b$ as a multiple of 1 b ; b. Understand a multiple of $a\ b$ as a multiple of 1 b , and use this understanding to multiply a fraction by a whole number; c. Solve real-world problems involving multiplication of a fraction by a whole number (i.e., use visual fraction models and equations to represent the problem).	
4.NSF.5 Express a fraction with a denominator of 10 as an equivalent fraction with a denominator of 100 and use this technique to add two fractions with respective denominators of 10 and 100.	
4.NSF.6 Write a fraction with a denominator of 10 or 100 using decimal notation, and read and write a decimal number as a fraction.	
4.NSF.7 Compare and order decimal numbers to hundredths, and justify using concrete and visual models.	
4.ATO.1 Interpret a multiplication equation as a comparison (e.g. interpret 35 = 5x7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5.) Represent verbal statements of multiplicative comparisons as multiplication equations.	
4.ATO.2 Solve real-world problems using multiplication (product unknown) and division (group size unknown, number of groups unknown).	Get Outside
4.ATO.3 Solve multi-step, real-world problems using the four operations. Represent the problem using an equation with a variable as the unknown quantity.	Every Drop Counts
4.ATO.4 Recognize that a whole number is a multiple of each of its factors. Find all factors for a whole number in the range 1 – 100 and determine whether the whole number is prime or composite	
4.ATO.5 Generate a number or shape pattern that follows a given rule and determine a term that appears later in the sequence.	
4.G.1 Draw points, lines, line segments, rays, angles (i.e., right, acute, obtuse), and parallel and perpendicular lines. Identify these in two-dimensional figures.	
4.G.2 Classify quadrilaterals based on the presence or absence of parallel or perpendicular lines.	
4.G.3 Recognize right triangles as a category, and identify right triangles.	
4.G.4 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line symmetric figures and draw lines of symmetry	
4.MDA.1 Convert measurements within a single system of measurement, customary (i.e., in., ft., yd., oz., lb., sec., min., hr.) or metric (i.e., cm, m, km, g, kg, mL, L) from a larger to a smaller unit.	Bursting Buds Here We Grow Again
4.MDA.2 Solve real-world problems involving distance/length, intervals of time within 12 hours, liquid volume, mass, and money using the four operations.	Adopt a Tree Bursting Buds Every Drop Counts Exploration Energy Field, Forest, & Stream Here We Grow Again Nature's Skyscrapers Soil Builders Tree Cookies Trees in Trouble
4.MDA.3 Apply the area and perimeter formulas for rectangles.	Discover Diversity
4.MDA.4 Create a line plot to display a data	Here We Grow Again
4.MDA.5 Understand the relationship of an angle measurement to a circle.	
4.MDA.6 Measure and draw angles in whole number degrees using a protractor	
4.MDA.7 Solve addition and subtraction problems to find unknown angles in real-world and mathematical problems.	
4.MDA.8 Determine the value of a collection of coins and bills greater than $1.00.	

Grade 4 Reverse Correlations – Mathematics

PLT Activity	Mathematics Standard
Adopt a Tree	4.MDA.2
Bursting Buds	4.MDA.1, 4.MDA.2
Here We Grow Again	4.MDA.1, 4.MDA.2, 4.MDA.4
Discover Diversity	4.NSBT.4, 4.MDA.3
Every Drop Counts	4.ATO.3, 4.MDA.2
Get Outside	4.NSBT.5, 4.ATO.2
Soil Builders	4.NSBT.4, 4.MDA.2
Tree Cookies	4.MDA.2
Trees in Trouble	4.MDA.2
Exploration Energy	4.NSBT.4, 4.MDA.2
Field, Forest, & Stream	4.MDA.2
Nature's Skyscrapers	4.MDA.2
Reduce, Reuse, Recycle	4.NSBT.4, 4.NSBT.5

Grade 4 ELA Standards Correlation to PLT Activities

	Standards	PLT Activities
INQUIRY	Standard 1: Formulate relevant, self-generated questions based on interests and/or needs that can be investigated.	A Tree's Life (V) Adopt a Tree (V) Did You Notice (V) Every Drop Counts Fallen Log Tree Cookies Web of Life
	Standard 2: Transact with texts to formulate questions, propose explanations, and consider alternative views and multiple perspectives.	Trees for Many Reasons
	Standard 3: Construct knowledge, applying disciplinary concepts and tools, to build deeper understanding of the world through exploration, collaboration, and analysis.	A Tree's Life (V) Adopt a Tree (V) Energy Exploration Did You Notice (V) Fallen Log Tree Cookies
	Standard 4: Synthesize integrated information to share learning and/or take action.	A Tree's Life (V) Backyard Safari (V) Did You Notice (V) Every Drop Counts Fallen Log Energy Exploration (V)
	Standard 5: Reflect throughout the inquiry process to assess metacognition, broaden understanding, and guide actions, both individually and collaboratively.	

READING: LITERARY TEXT	Standards	PLT Activities
	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
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	Standard 6: Summarize key details and ideas to support analysis of thematic development.	Trees for Many Reasons
	Standard 7: Analyze the relationship among ideas, themes, or topics in multiple media, formats, and in visual, auditory, and kinesthetic modalities.	
	Standard 8: Analyze characters, settings, events, and ideas as they develop and interact within a particular context.	Trees for Many Reasons
	Standard 9: Interpret and analyze the author's use of words, phrases, and conventions, and how their relationships shape meaning and tone in print and multimedia texts.	Trees for Many Reasons
	Standard 10: Apply a range of strategies to determine and deepen the meaning of known, unknown, and multiple-meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	
	Standard 11: Analyze and provide evidence of how the author's choice of point of view, perspective, and purpose shape content, meaning, and style.	Trees for Many Reasons
	Standard 12: Analyze and critique how the author uses structures in print and multimedia texts to shape meaning and impact the reader.	Trees for Many Reasons
	Standard 13: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

READING: INFORMATIONAL TEXT	Standards	PLT Activities
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	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	
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	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence and investigating multiple interpretations.	Nothing Succeeds Like Succession (V)
	Standard 6: Summarize key details and ideas to support analysis of central ideas.	Did You Notice (V) Tree Cookies
	Standard 7: Research events, topics, ideas, or concepts through multiple media, formats, and in visual, auditory, and kinesthetic modalities.	A Tree's Life (V) Backyard Safari (V) Bursting Buds (V) Did You Notice (V) Peppermint Beetle (V)

		Charting Biodiversity Tree Cookies Web of Life
	Standard 8: Interpret and analyze the author's use of words, phrases, text features, conventions, and structures, and how their relationships shape meaning and tone in print and multimedia texts.	
	Standard 9: Apply a range of strategies to determine the meaning of known, unknown, and multiple meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	
	Standard 10: Analyze and provide evidence of how the author's choice of purpose and perspective shapes content, meaning, and style.	
	Standard 11: Analyze and critique how the author uses structures in print and multimedia texts to craft informational and argument writing.	
	Standard 12: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

	Standards	**PLT Activities**
WRITING	Standard 1: Write arguments to support claims with clear reasons and relevant evidence.	
	Standard 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	A Tree's Life (V) Bursting Buds (V) Tree Factory Tree ID Trees in Trouble Water Wonders Web of Life
	Standard 3: Write narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well structured event sequences.	A Tree's Life (V) Bursting Buds (V) Fallen Log Get Outside Water Wonders
	Standard 4: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	A Tree's Life (V) Bursting Buds (V) Fallen Log Get Outside Tree Factory Tree ID Trees in Trouble Water Wonders Web of Life
	Standard 5: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	A Tree's Life (V) Bursting Buds (V) Fallen Log Get Outside Tree Factory Tree ID Trees in Trouble Water Wonders Web of Life

	Standard 6: Write independently, legibly, and routinely for a variety of tasks, purposes, and audiences over short and extended time frames.	A Tree's Life (V) Bursting Buds (V) Fallen Log Get Outside Poet Tree Tree Factory Tree ID Trees in Trouble Water Wonders Web of Life

	Standards	**PLT Activities**
COMMUNICATION	Standard 1: Interact with others to explore ideas and concepts, communicate meaning, and develop logical interpretations through collaborative conversations; build upon the ideas of others to clearly express one's own views while respecting diverse perspectives.	Backyard Safari (V) Did You Notice (V) Have Seeds Will Travel (V) We All Need Trees (V) Charting Biodiversity Discover Diversity Fallen Log My Green Future Peek at Packaging Soil Builders Tree Cookies Trees for Many Reasons Our Federal Forests (V)
	Standard 2: Articulate ideas, claims, and perspectives in a logical sequence using information, findings, and credible evidence from sources.	A Tree's Life (V) Adopt a Tree (V) Backyard Safari (V) Did You Notice (V) Charting Biodiversity Discover Diversity Fallen Log Poet Tree Tree Cookies Energy Exploration (V)
	Standard 3: Communicate information through strategic use of multiple modalities and multimedia to enrich understanding when presenting ideas and information.	A Tree's Life (V) Adopt a Tree (V) Charting Biodiversity Discover Diversity Fallen Log My Green Future Poet Tree Soil Builders Water Wonders Energy Exploration (V) Our Federal Forests (V)

	Standard 4: Critique how a speaker addresses content and uses craft techniques that stylistically and structurally inform, engage, and impact audience and convey messages.	Poet Tree Soil Builders
	Standard 5: Incorporate craft techniques to engage and impact audience and convey messages.	Poet Tree

(V) Variation for 3-5

Grade 4 Reverse Correlations – English Language Arts

PLT Activity	Standard
A Tree's Life (V)	4.I.1, 4.I.3, 4.I.4, 4.RI.7, 4.W.2, 4.W.3, 4.W.4, 4.W.5, 4.W.6, 4.C.2, 4.C.3
Adopt a Tree (V)	4.I.1, 4.I.3, 4.C.2, 4.C.3
Backyard Safari (V)	4.I.4, 4.RI.7, 4.C.1, 4.C.2
Bursting Buds (V)	4.RI.7, 4.W.2, 4.W.3, 4.W.4, 4.W.5, 4.W.6
Did You Notice (V)	4.I.1, 4.I.3, 4.I.4, 4.RI.6, 4.RI.7, 4.C.1, 4.C.2,
Peppermint Beetle	4.RI.7
Have Seeds Will Travel (V)	4.C.1
We All Need Trees (V)	4.C.1
Charting Biodiversity	4.RI.7, 4.C.1, 4.C.2, 4.C.3
Discover Diversity	4.C.1, 4.C.2, 4.C.3
Every Drop Counts	4.I.1, 4.I.4
Fallen Log	4.I.1, 4.I.3, 4.I.4, 4.W.3, 4.W.4, 4.W.5, 4.W.6, 4.C.1, 4.C.2, 4.C.3
Get Outside	4.W.3, 4.W.4, 4.W.5, 4.W.6
My Green Future	4.C.1, 4.C.3
Peek at Packaging	4.C.1
Poet Tree	4.W.6, 4.C.2, 4.C.3, 4.C.4, 4.C.5
Soil Builders	4.C.1, 4.C.3, 4.C.4
Tree Cookies	4.I.1, 4.I.3, 4.RI.6, 4.RI.7, 4.C.1, 4.C.2,
Tree Factory	4.W.2, 4.W.4, 4.W.5, 4.W.6
Trees for Many Reasons	4.I.2, 4.RL.6, 4.RL.8, 4.RL.9, 4.RL.11, 4.RL.12, 4.C.1,
Tree ID	4.W.2, 4.W.4, 4.W.5, 4.W.6
Trees in Trouble	4.W.2, 4.W.4, 4.W.5, 4.W.6
Water Wonders	4.W.2, 4.W.3, 4.W.4, 4.W.5, 4.W.6, 4.C.3
Web of Life	4.I.1, 4.RI.7, 4.W.2, 4.W.4, 4.W.5, 4.W.6
Exploration Energy (V)	4.I.3, 4.I.4, 4.C.2, 4.C.3
Nothing Succeeds Like Succession (V)	4.RI.5
Our Federal Forests (V)	4.C.1, 4.C.3

Grade 4 Social Studies Standards Correlation to PLT Activities*

*There are no PLT activities that correlate to these 4th grade standards.

Standards	PLT Activities
Standard 1: Demonstrate an understanding of the settlement and colonization of North America, including South Carolina, between 1600–1730.	
4.1.CO Compare the interactions among cultural groups as a result of European colonization	
4.1.CE Identify the effects of changing economic systems on the diverse populations in British North America.	
4.1.P Explain the development of political institutions and social characteristics that defined the British colonial regions.	
4.1.CX Contextualize the experience of Africans, Europeans, and Native Americans in South Carolina.	
4.1.CC Identify patterns of change and continuity in the development of economic systems in British North America.	
4.1.E Analyze multiple perspectives on the economic, political, and social developments of British North America and South Carolina.	
Standard 2: Demonstrate an understanding of the identity of a new nation, including the state of South Carolina between 1730-1800.	
4.2.CO Compare the roles of marginalized groups during the American Revolution.	
4.2.CE Examine the economic and political motivations for colonists to declare independence from Great Britain	
4.2.P Analyze the sequence of events that led to the establishment of the U. S. as a democratic republic.	
4.2.CX Contextualize South Carolina's role in the development of the new nation.	
4.2.CC Explain the continuities and changes in natural rights as seen from the French and Indian War to the creation of the Bill of Rights.	
4.2.E Analyze multiple perspectives on the economic, political, and social developments of the new nation.	
Standard 3: Demonstrate an understanding of the expansion and growth of South Carolina and the United States between 1800–1850.	
4.3.CO Compare the motivations for and reactions to various expeditions into the Western territories.	
4.3.CE Analyze the effects of government policies in promoting United States territorial expansion into the west.	
4.3.P Analyze the role of technology and the environmental impact during the period of Westward Expansion.	
4.3.CX Contextualize South Carolina's role in the development of sectionalism during the antebellum period.	
4.3.CC Recognize patterns of continuity and change in the experiences of Native Americans and Spanish-speaking people as the U. S. expanded westward.	
4.3.E Analyze multiple perspectives of early westward expansion, including the addition of slave and free territories and states.	
Standard 4: Demonstrate an understanding of economic, political, and social divisions during the United States Civil War, including the role of South Carolina between 1850–1870.	
4.4.CO Compare the economic and political causes of the Civil War. 4.4.CX Contextualize South Carolina's experience during the Civil War.	
4.4.CE Explain the effects of military strategies utilized by the Union and the Confederacy.	
4.4.P Explain how emancipation was achieved as a result of civic participation.	
4.4.CX Contextualize South Carolina's experience during the Civil War.	
4.4.CC Identify and evaluate the economic, political, and social changes experienced throughout the Civil War.	
4.4.E Analyze the economic, political, and social divisions during the Civil War.	
Standard 5: Demonstrate an understanding of the contributions different groups made to impact the economic, political, and social developments during Reconstruction of the United States and South Carolina in the period of 1860– 1880.	
4.5.CO Compare the roles of various groups on Reconstruction	
4.5.CE Analyze the impact of federal legislation on the South during Reconstruction.	
4.5.P Summarize Reconstruction as a turning point in American history.	
4.5.CX Contextualize the economic, labor, political, and social conditions in South Carolina during the period of Reconstruction.	
4.5.CC Identify and evaluate the impact of economic, political, and social events on the African American experience throughout Reconstruction.	
4.5.E Analyze multiple perspectives of the economic, political, and social effects of Reconstruction on different populations in the South and in other regions of the U. S.	

GRADE FIVE STANDARDS

Grade 5 Science Performance Expectations Correlation to PLT Activities

Performance Expectations	PLT Activities
5-PS1-1. Develop a model to describe that matter is made of particles too small to be seen.	
5-PS1-2. Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.	
5-PS1-3. Make observations and measurements to identify materials based on their properties.	
5-PS1-4. Conduct an investigation to determine whether the mixing of two or more substances results in new substances.	
5-PS2-1. Support an argument that the gravitational force exerted by Earth on objects is directed down	
5-PS3-1. Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.	Birds and Bugs Signs of Fall Tree Factory Web of Life
5-LS1-1. Support an argument with evidence that plants obtain materials they need for growth mainly from air and water.	Here We Grow Again Every Tree for Itself* Tree Cookies Tree Factory
5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.	Birds and Bugs Fallen Log Soil Builders Web of Life
5-ESS1-1. Support an argument with evidence that the apparent brightness of the sun compared to other stars is due to their relative distances from Earth.	
5-ESS1-2. Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.	
5-ESS2-1. Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.	Field, Forest, & Stream Water Wonders*
5-ESS2-2. Describe and graph the amounts of saltwater and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.	
5-ESS3-1. Evaluate potential solutions to problems that individual communities face in protecting the Earth's resources and environment.	Every Drop Counts Trees for Many Reasons Exploration Energy Improve Your Place Renewable or Not? Decisions, Decisions Trees in Trouble Our Federal Forests Plant a Tree Reduce, Reuse, Recycle

* Fully addresses the Performance Expectation

Grade 5 Reverse Correlations – Science

PLT Activity	Science Performance Expectations
Birds and Bugs	5-LS2-1 5-PS3-1
Here We Grow Again	5-LS1-1
Every Drop Counts	5-ESS3-1
Every Tree for Itself*	5-LS1-1
Fallen Log	5-LS2-1
Signs of Fall	5-PS3-1
Soil Builders	5-LS2-1 5-ESS2-1
Tree Cookies	5-LS1-1
Tree Factory	5-PS3-1 5-LS1-1
Trees for Many Reasons	5-ESS3-1
Trees in Trouble	5-ESS3-1
Water Wonders*	5-ESS2-1
Web of Life	5-PS3-1 5-LS2-1
Decisions, Decisions	5-ESS3-1
Exploration Energy	5-ESS3-1
Field, Forest, and Stream	5-ESS2-1
Improve your Place	5-ESS3-1
Our Federal Forests	5-ESS3-1
Plant a Tree	5-ESS3-1
Reduce, Reuse, Recycle	5-ESS3-1
Renewable or Not?	5-ESS3-1

* Fully addresses the Performance Expectation

Grade 5 Mathematics Standards Correlation to PLT Activities

Standards	PLT Activities
5.NSBT.1 Understand that, in a multi-digit whole number, a digit in one place represents 10 times what the same digit represents in the place to its right and represents 1 10 times what the same digit represents in the place to its left.	
5.NSBT.2 Use whole number exponents to explain: a. patterns in the number of zeroes of the product when multiplying a number by powers of 10; b. patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10.	
5.NSBT.3 Read and write decimals in standard and expanded form. Compare two decimal numbers to the thousandths using the symbols >, =, or <.	Renewable or Not
5.NSBT.4 Round decimals to any given place value within thousandths.	
5.NSBT.5 Fluently multiply multi-digit whole numbers using strategies to include a standard algorithm.	Every Drop Counts Exploration Energy Get Outside If You Were the Boss Nature's Skyscrapers

5.NSBT.6 Divide up to a four-digit dividend by a two-digit divisor, using strategies based on place value, the properties of operations, and the relationship between multiplication and division.	Exploration Energy If You Were the Boss Nature's Skyscrapers
5.NSBT.7 Add, subtract, multiply, and divide decimal numbers to hundredths using concrete area models and drawings.	If You Were the Boss
5.NSF.1 Add and subtract fractions with unlike denominators (including mixed numbers) using a variety of models, including an area model and number line.	
5.NSF.2 Solve real-world problems involving addition and subtraction of fractions with unlike denominators.	
5.NSF.3 Understand the relationship between fractions and division of whole numbers by interpreting a fraction as the numerator divided by the denominator (i.e., $a\ b = a \div b$)	Nature's Skyscrapers
5.NSF.4 Extend the concept of multiplication to multiply a fraction or whole number by a fraction. a. Recognize the relationship between multiplying fractions and finding the areas of rectangles with fractional side lengths; b. Interpret multiplication of a fraction by a whole number and a whole number by a fraction and compute the product; c. Interpret multiplication in which both factors are fractions less than one and compute the product.	
5.NSF.5 Justify the reasonableness of a product when multiplying with fractions. a. Estimate the size of the product based on the size of the two factors; b. Explain why multiplying a given number by a number greater than 1 (e.g., improper fractions, mixed numbers, whole numbers) results in a product larger than the given number; c. Explain why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; d. Explain why multiplying the numerator and denominator by the same number has the same effect as multiplying the fraction by 1.	
5.NSF.6 Solve real-world problems involving multiplication of a fraction by a fraction, improper fraction and a mixed number.	
5.NSF.7 Extend the concept of division to divide unit fractions and whole numbers by using visual fraction models and equations. a. Interpret division of a unit fraction by a non-zero whole number and compute the quotient; b. Interpret division of a whole number by a unit fraction and compute the quotient.	
5.NSF.8 Solve real-world problems involving division of unit fractions and whole numbers, using visual fraction models and equations.	Nature's Skyscrapers
5.ATO.1 Evaluate numerical expressions involving grouping symbols (i.e., parentheses, brackets, braces).	
5.ATO.2 Translate verbal phrases into numerical expressions and interpret numerical expressions as verbal phrases.	
5.ATO.3 Investigate the relationship between two numerical patterns. a. Generate two numerical patterns given two rules and organize in tables; b. Translate the two numerical patterns into two sets of ordered pairs; c. Graph the two sets of ordered pairs on the same coordinate plane; d.	Here We Grow Again
5.G.1 Define a coordinate system. a. The x- and y- axes are perpendicular number lines that intersect at 0 (the origin); b. Any point on the coordinate plane can be represented by its coordinates; c. The first number in an ordered pair is the x-coordinate and represents the horizontal distance from the origin; d. The second number in an ordered pair is the y-coordinate and represents the vertical distance from the origin.	
5.G.2 Plot and interpret points in the first quadrant of the coordinate plane to represent realworld and mathematical situations.	
5.G.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.	
5.G.4 Classify two-dimensional figures in a hierarchy based on their attributes.	
5.MDA.1 measurements within a single system of Convert measurement: customary (i.e., in., ft., yd., oz., lb., sec., min., hr.) or metric (i.e., mm, cm, m, km, g, kg, mL, L) from a larger to a smaller unit and a smaller to a larger unit.	Exploration Energy Nature's Skyscrapers Soil Builders
5.MDA.2 Create a line plot consisting of unit fractions and use operations on fractions to solve problems related to the line plot.	
5.MDA.3 Understand the concept of volume measurement. a. Recognize volume as an attribute of right rectangular prisms; b. Relate volume measurement to the operations of multiplication and addition by packing right rectangular prisms and then counting the layers of standard unit cubes; c.	

Determine the volume of right rectangular prisms using the formula derived from packing right rectangular prisms and counting the layers of standard unit cubes.	
5.MDA.4 Differentiate among perimeter, area and volume and identify which application is appropriate for a given situation.	

Grade 5 Reverse Correlations – Mathematics

PLT Activity	Mathematics Standard
Here We Grow Again	5.ATO.3
Every Drop Counts	5.NSBT.5
Get Outside	5.NSBT.5
Soil Builders	5.MDA.1
Exploration Energy	5.NSBT.5, 5.NSBT.6, 5.MDA.1
If You Were the Boss	5.NSBT.5, 5.NSBT.6, 5.NSBT.7
Nature's Skyscrapers	5.NSBT.5, 5.NSBT.6, 5.NSF.3, 5.NSF.8, 5.MDA.1
Renewable or Not	5.NSBT.3

Grade 5 ELA Standards Correlation to PLT Activities

	Standards	PLT Activities
INQUIRY	Standard 1: Formulate relevant, self-generated questions based on interests and/or needs that can be investigated.	A Tree's Life (V) Adopt a Tree (V) Did You Notice (V) Every Drop Counts Fallen Log Tree Cookies Web of Life
	Standard 2: Transact with texts to formulate questions, propose explanations, and consider alternative views and multiple perspectives.	Trees for Many Reasons
	Standard 3: Construct knowledge, applying disciplinary concepts and tools, to build deeper understanding of the world through exploration, collaboration, and analysis.	A Tree's Life (V) Adopt a Tree (V) Energy Exploration Did You Notice (V) Fallen Log Tree Cookies
	Standard 4: Synthesize integrated information to share learning and/or take action.	A Tree's Life (V) Backyard Safari (V) Did You Notice (V) Every Drop Counts Fallen Log Energy Exploration (V)
	Standard 5: Reflect throughout the inquiry process to assess metacognition, broaden understanding, and guide actions, both individually and collaboratively.	

READING: LITERARY TEXT	Standards	PLT Activities
	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.	
	Standard 6: Summarize key details and ideas to support analysis of thematic development.	Trees for Many Reasons
	Standard 7: Analyze the relationship among ideas, themes, or topics in multiple media, formats, and in visual, auditory, and kinesthetic modalities.	
	Standard 8: Analyze characters, settings, events, and ideas as they develop and interact within a particular context.	Trees for Many Reasons
	Standard 9: Interpret and analyze the author's use of words, phrases, and conventions, and how their relationships shape meaning and tone in print and multimedia texts.	Trees for Many Reasons
	Standard 10: Apply a range of strategies to determine and deepen the meaning of known, unknown, and multiple-meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	
	Standard 11: Analyze and provide evidence of how the author's choice of point of view, perspective, and purpose shape content, meaning, and style.	Trees for Many Reasons
	Standard 12: Analyze and critique how the author uses structures in print and multimedia texts to shape meaning and impact the reader.	Trees for Many Reasons
	Standard 13: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

READING: INFORMATIONAL TEXT	Standards	PLT Activities
	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence and investigating multiple interpretations.	Nothing Succeeds like Succession (V)
	Standard 6: Summarize key details and ideas to support analysis of central ideas.	Did You Notice (V) Tree Cookies
	Standard 7: Research events, topics, ideas, or concepts through multiple media, formats, and in visual, auditory, and kinesthetic modalities.	A Tree's Life (V) Backyard Safari (V) Bursting Buds (V) Did You Notice (V) Peppermint Beetle (V)

		Charting Biodiversity Tree Cookies Web of Life
	Standard 8: Interpret and analyze the author's use of words, phrases, text features, conventions, and structures, and how their relationships shape meaning and tone in print and multimedia texts.	
	Standard 9: Apply a range of strategies to determine the meaning of known, unknown, and multiple meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	
	Standard 10: Analyze and provide evidence of how the author's choice of purpose and perspective shapes content, meaning, and style.	
	Standard 11: Analyze and critique how the author uses structures in print and multimedia texts to craft informational and argument writing.	
	Standard 12: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

	Standards	**PLT Activities**
WRITING	Standard 1: Write arguments to support claims with clear reasons and relevant evidence.	
	Standard 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	A Tree's Life (V) Bursting Buds (V) Tree Factory Tree ID Trees in Trouble Water Wonders Web of Life
	Standard 3: Write narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences.	A Tree's Life (V) Bursting Buds (V) Fallen Log Get Outside Water Wonders
	Standard 4: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	A Tree's Life (V) Bursting Buds (V) Fallen Log Get Outside Tree Factory Tree ID Trees in Trouble Water Wonders Web of Life
	Standard 5: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	A Tree's Life (V) Bursting Buds (V) Fallen Log Get Outside Tree Factory Tree ID Trees in Trouble Water Wonders Web of Life

	Standard 6: Write independently, legibly, and routinely for a variety of tasks, purposes, and audiences over short and extended time frames.	A Tree's Life (V) Bursting Buds (V) Fallen Log Get Outside Tree Factory Tree ID Trees in Trouble Water Wonders Web of Life Poet Tree

	Standards	**PLT Activities**
COMMUNICATION	Standard 1: Interact with others to explore ideas and concepts, communicate meaning, and develop logical interpretations through collaborative conversations; build upon the ideas of others to clearly express one's own views while respecting diverse perspectives.	Backyard Safari (V) Did You Notice (V) Have Seeds Will Travel (V) We All Need Trees (V) Charting Biodiversity Discover Diversity Fallen Log My Green Future Peek at Packaging Soil Builders Tree Cookies Trees for Many Reasons Our Federal Forests (V)
	Standard 2: Articulate ideas, claims, and perspectives in a logical sequence using information, findings, and credible evidence from sources.	A Tree's Life (V) Adopt a Tree (V) Backyard Safari (V) Did You Notice (V) Charting Biodiversity Discover Diversity Fallen Log Poet Tree Tree Cookies Energy Exploration (V)
	Standard 3: Communicate information through strategic use of multiple modalities and multimedia to enrich understanding when presenting ideas and information.	A Tree's Life (V) Adopt a Tree (V) Charting Biodiversity Discover Diversity Fallen Log My Green Future Poet Tree Soil Builders Water Wonders Energy Exploration (V) Our Federal Forests (V)

	Standard 4: Critique how a speaker addresses content and uses craft techniques that stylistically and structurally inform, engage, and impact audience and convey messages.	Poet Tree Soil Builders
	Standard 5: Incorporate craft techniques to engage and impact audience and convey messages.	Poet Tree

(V) Variation for 3-5 (E) Enrichment Activity

Grade 5 Reverse Correlations – English Language Arts

PLT Activity	Standard
A Tree's Life (V)	5.I.1, 5.I.3, 5.I.4, 5.RI.7, 5.W.2, 5.W.3, 5.W.4, 5.W.5, 5.W.6, 5.C.2, 5.C.3
Adopt a Tree (V)	5.I.1, 5.I.3, 5.C.2, 5.C.3
Backyard Safari (V)	5.I.4, 5.RI.7, 5.C.1, 5.C.2
Bursting Buds (V)	5.RI.7, 5.W.2, 5.W.3, 5.W.4, 5.W.5, 5.W.6
Did You Notice (V)	5.I.1, 5.I.3, 5.I.4, 5.RI.6, 5.RI.7, 5.C.1, 5.C.2,
Peppermint Beetle	5.RI.7
Have Seeds Will Travel (V)	5.C.1
We All Need Trees (V)	5.C.1
Charting Biodiversity	5.RI.7, 5.C.1, 5.C.2, 5.C.3
Discover Diversity	5.C.1, 5.C.2, 5.C.3
Every Drop Counts	5.I.1, 5.I.4
Fallen Log	5.I.1, 5.I.3, 5.I.4, 5.W.3, 5.W.4, 5.W.5, 5.W.6, 5.C.1, 5.C.2, 5.C.3
Get Outside	5.W.3, 5.W.4, 5.W.5, 5.W.6
My Green Future	5.C.1, 5.C.3
Peek at Packaging	5.C.1
Poet Tree	5.W.6, 5.C.2, 5.C.3, 5.C.4, 5.C.5
Soil Builders	5.C.1, 5.C.3, 5.C.4
Tree Cookies	5.I.1, 5.I.3, 5.RI.6, 5.RI.7, 5.C.1, 5.C.2,
Tree Factory	5.W.2, 5.W.4, 5.W.5, 5.W.6
Trees for Many Reasons	5.I.2, 5.RL.6, 5.RL.8, 5.RL.9, 5.RL.11, 5.RL.12, 5.C.1,
Tree ID	5.W.2, 5.W.4, 5.W.5, 5.W.6
Trees in Trouble	5.W.2, 5.W.4, 5.W.5, 5.W.6
Water Wonders	5.W.2, 5.W.3, 5.W.4, 5.W.5, 5.W.6, 5.C.3
Web of Life	5.I.1, 5.RI.7, 5.W.2, 5.W.4, 5.W.5, 5.W.6
Exploration Energy (V)	5.I.3, 5.I.4, 5.C.2, 5.C.3
Nothing Succeeds Like Succession (V)	5.RI.5
Our Federal Forests (V)	5.C.1, 5.C.3

Grade 5 Social Studies Standards Correlation to PLT Activities

Standards	PLT Activities
Standard 1: Demonstrate an understanding of the economic, political, and social effects of expansion and industrialization on the United States and South Carolina between 1860–1910.	
5.1.CO Compare the physical landscape and demographics of the U.S. before and after the Transcontinental Railroad.	
5.1.CE Examine push- and pull-factors related to immigration and expansion on urban and rural populations during the period.	
5.1.P Summarize how the United States' involvement in the Spanish American War led to increased U.S. economic expansion and imperialism.	
5.1.CX Contextualize how the Second Industrial Revolution led to an increased desire for raw materials and the United States involvement in imperialistic efforts and economic expansion.	
5.1.CC Summarize how imperialism and economic expansion impacted the experiences of different groups and shaped American cultural identities.	
5.1.E Analyze multiple perspectives on the economic, political, and social effects of western expansion, the Industrial Revolution, and immigration through primary and secondary sources, and evaluate the subsequent changes to the U. S.	
Standard 2: Demonstrate an understanding of how international events and conditions during the early 20th Century (i.e., 1910–1940) affected the United States and South Carolina.	
5.2.CO Compare the cultural and economic impacts of the 1929 Stock Market Crash on the U. S. and South Carolina.	
5.2.CE Examine the primary causes of World War I and the events which led to U.S. involvement.	
5.2.P Summarize how the role of the federal government expanded during the period.	
5.2.CX Contextualize the post-war economic climate on the cultural landscape throughout the United States and South Carolina.	
5.2.CC Examine the continuities and changes that resulted from New Deal programs and the impact these programs had on various groups throughout the U. S. and South Carolina.	
5.2.E Evaluate multiple perspectives from the period, including the economic, political, and social impacts of World War I, the 1920s, the Great Depression, and the New Deal using primary and secondary sources.	
Standard 3: Demonstrate an understanding of the economic, political, and social effects of World War II, the Holocaust, and their aftermath (i.e., 1930–1950) on the United States and South Carolina.	
5.3.CO Compare the ideologies and policies that led to World War II.	
5.3.CE Analyze the cause and effect of government-sponsored policies within the United States and Europe related to the status of different groups, to include the Holocaust.	
5.3.P Summarize the U.S. government's transition away from neutrality policies following World War I that led to its eventual involvement in World War II.	
5.3.CX Contextualize the technological and geographic influence on military strategies in the Pacific and European theaters of war of World War II	
5.3.CC Analyze the changes and continuities regarding the United States' international leadership during the period, including the rebuilding of Europe and the resettlement of displaced persons resulting from the Holocaust.	
5.3.E Analyze multiple perspectives on the economic, political, and social effects of World War II and its aftermath using primary and secondary sources.	

Standard 4: Demonstrate an understanding of the conflicts, innovations, and social changes in the United States, including South Carolina, from 1950–1980.	
5.4.CO Compare and contrast the capitalist and communist ideologies.	
5.4.CE Analyze the causes and impacts of social movements in the U. S. and South Carolina.	
5.4.P Summarize the economic, political, and social changes in the U. S. after World War II.	
5.4.CX Contextualize the tension between the United States and the Soviet Union during the Cold War.	
5.4.CC Analyze the continuities and changes of race relations in the United States and South Carolina following the Supreme Court decisions of Briggs v. Elliott and Brown v. Board of Education.	
5.4.E Analyze multiple perspectives on the economic, political, and social effects of the Cold War, Space Race, and Civil Rights Movement using primary and secondary sources.	
Standard 5: Demonstrate an understanding of the contemporary global economic, social, and political roles of the United States and South Carolina from 1980–present	
5.5.CO Compare and contrast the focus of the U.S. as a world leader before and after the September 11, 2001, attacks.	
5.5.CE Analyze the impact of digital technologies on the U.S., and describe the impact those technologies had on its global influence.	
5.5.P Summarize the global involvement of the U.S. using the fall of the Soviet Union as a turning point.	
5.5.CX Contextualize the changes in rural communities in South Carolina within national and global industries.	Decisions, Decisions
5.5.CC Analyze the continuities and changes in U.S. relationships with countries around the world as a result of the economic, political, and social changes in this period.	Global Goods The Global Climate
5.5.E Analyze multiple perspectives on the economic, political, and social effects of global interdependence after 1980 using primary and secondary sources.	Global Goods The Global Climate

Grade 5 Reverse Correlations – Social Studies

PLT Activity	Social Studies Standard
Decisions, Decisions	5.5.CX
Global Goods	5.5.CC, 5.5.E
The Global Climate	5.5.CC, 5.5.E

GRADE SIX STANDARDS

Grade 6 Science Performance Expectations Correlation to PLT Activities

Performance Expectations	PLT Activities
6-PS1-4. Develop and use a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.	
6-PS3-3. Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.	
6-PS3-4. Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample.	
6-PS4-2. Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials	
6-LS1-1. Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells.	
6-LS1-2. Develop and use a model to describe the function of a cell as a whole and ways the parts of cells contribute to the function.	Every Tree for Itself Signs of Fall Tree Factory
6-LS1-3. Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.	
6-LS1-8. Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.	Get Outside * Peppermint Beetle*
6-ESS1-4. Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6-billion-year-old history.	
6-ESS2-1. Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process	
6-ESS2-2. Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.	
6-ESS2-3. Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.	
6-ESS2-4. Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.	Water Wonders
6-ESS2-5. Analyze and interpret data to provide evidence for how the motions and complex interactions of air masses result in changes in weather conditions.	Field, Forest, & Stream The Global Climate
6-ESS2-6. Develop and use models to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.	
6-ESS3-2. Analyze and interpret data on natural hazards to identify patterns, which help forecast future catastrophic events and inform the development of technologies to mitigate their effects.	

* Introduction activity for this performance expectation

Grade 6 Reverse Correlations – Science

PLT Activity	Science Performance Expectations
Get Outside *	6-LS1-8
Peppermint Beetle *	6-LS1-8
Every Tree for Itself **	6-LS1-2
Signs of Fall	6-LS1-2 (chlorophyll)
Tree Factory	6-LS1-2
Water Wonders	6-ESS2-4
Field, Forest, and Stream	6-ESS2-5
The Global Climate	6-ESS2-5

*Creates sensory experiences as an introduction to 6-LS1-8
**Role of photosynthesis in tree growth

Grade 6 Mathematics Standards Correlation to PLT Activities

Standards	PLT Activities
6.NS.1 Compute and represent quotients of positive fractions using a variety of procedures (e.g., visual models, equations, and real-world situations).	
6.NS.2 Fluently divide multi-digit whole numbers using a standard algorithmic approach	
6.NS.3 Fluently add, subtract, multiply and divide multi-digit decimal numbers using a standard algorithmic approach.	
6.NS.4 Find common factors and multiples using two whole numbers. a. Compute the greatest common factor (GCF) of two numbers both less than or equal to 100. b. Compute the least common multiple (LCM) of two numbers both less than or equal to 12. c. Express sums of two whole numbers, each less than or equal to 100, using the distributive property to factor out a common factor of the original addends.	
6.NS.5 Understand that the positive and negative representations of a number are opposites in direction and value. Use integers to represent quantities in real-world situations and explain the meaning of zero in each situation.	
6.NS.6 Extend the understanding of the number line to include all rational numbers and apply this concept to the coordinate plane. a. Understand the concept of opposite numbers, including zero, and their relative locations on the number line. b. Understand that the signs of the coordinates in ordered pairs indicate their location on an axis or in a quadrant on the coordinate plane. c. Recognize when ordered pairs are reflections of each other on the coordinate plane across one axis, both axes, or the origin. d. Plot rational numbers on number lines and ordered pairs on coordinate planes	
6.NS.7 Understand and apply the concepts of comparing, ordering, and finding absolute value to rational numbers. a. Interpret statements using equal to (=) and not equal to (≠). b. Interpret statements using less than (), and equal to (=) as relative locations on the number line. c. Use concepts of equality and inequality to write and to explain real-world and mathematical situations. d. Understand that absolute value represents a number's distance from zero on the number line and use the absolute value of a rational number to represent real world situations. e. Recognize the difference between comparing absolute values and ordering rational numbers. For negative rational numbers, understand that as the absolute value increases, the value of the negative number decreases	
6.NS.8 Extend knowledge of the coordinate plane to solve real-world and mathematical problems involving rational numbers. a. Plot points in all four quadrants to represent the problem. b. Find the distance between two points when ordered pairs have the same x-coordinates or same y-coordinates. c. Relate finding the distance between two points in a coordinate plane to absolute value using a number line.	

6.NS.9 Investigate and translate among multiple representations of rational numbers (fractions, decimal numbers, percentages). Fractions should be limited to those with denominators of 2, 3, 4, 5, 8, 10, and 100.	
6.RP.1 Interpret the concept of a ratio as the relationship between two quantities, including part to part and part to whole.	Renewable or Not Reduce, Reuse, Recycle
6.RP.2 Investigate relationships between ratios and rates. a. Translate between multiple representations of ratios (i.e., $a\ b/$, a: b, a to b, visual models). b. Recognize that a rate is a type of ratio involving two different units. c. Convert from rates to unit rates	Exploration Energy Renewable or Not Reduce, Reuse, Recycle
6.RP.3 Apply the concepts of ratios and rates to solve real-world and mathematical problems. a. Create a table consisting of equivalent ratios and plot the results on the coordinate plane. b. Use multiple representations, including tape diagrams, tables, double number lines, and equations, to find missing values of equivalent ratios. c. Use two tables to compare related ratios. d. Apply concepts of unit rate to solve problems, including unit pricing and constant speed. e. Understand that a percentage is a rate per 100 and use this to solve problems involving wholes, parts, and percentages. f. Solve one-step problems involving ratios and unit rates (e.g., dimensional analysis).	Exploration Energy Field, Forest, & Stream Forest in the City If You Were the Boss Nature's Skyscrapers Our Federal Forests Renewable or Not Reduce, Reuse, Recycle The Global Climate What's in a Label
6.EEI.1 Write and evaluate numerical expressions involving whole-number exponents and positive rational number bases using the Order of Operations.	
6.EEI.2 Extend the concepts of numerical expressions to algebraic expressions involving positive rational numbers. a. Translate between algebraic expressions and verbal phrases that include variables. b. Investigate and identify parts of algebraic expressions using mathematical terminology, including term, coefficient, constant, and factor. c. Evaluate real-world and algebraic expressions for specific values using the Order of Operations. Grouping symbols should be limited to parentheses, braces, and brackets. Exponents should be limited to whole-numbers.	
6.EEI.3 Apply mathematical properties (e.g., commutative, associative, distributive) to generate equivalent expressions.	
6.EEI.4 Apply mathematical properties (e.g., commutative, associative, distributive) to justify that two expressions are equivalent.	
6.EEI.5 Understand that if any solutions exist, the solution set for an equation or inequality consists of values that make the equation or inequality true.	
6.EEI.6 Write expressions using variables to represent quantities in real-world and mathematical situations. Understand the meaning of the variable in the context of the situation.	Nature's Skyscrapers
6.EEI.7 Write and solve one-step linear equations in one variable involving nonnegative rational numbers for real-world and mathematical situations.	
6.EEI.8 Extend knowledge of inequalities used to compare numerical expressions to include algebraic expressions in real-world and mathematical situations. a. Write an inequality of the form $x > c$ or $x < c$ and graph the solution set on a number line. b. Recognize that inequalities have infinitely many solutions.	
6.EEI.9 Investigate multiple representations of relationships in real-world and mathematical situations. a. Write an equation that models a relationship between independent and dependent variables. b. Analyze the relationship between independent and dependent variables using graphs and tables. c. Translate among graphs, tables, and equations.	Get Outside The Global Climate Nothing Succeeds like Succession
6.GM.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	
6.GM.2 Use visual models (e.g., model by packing) to discover that the formulas for the volume of a right rectangular prism ($V = lwh$, $V = Bh$) are the same for whole or fractional edge lengths. Apply these formulas to solve real-world and mathematical problems	
6.GM.3 Apply the concepts of polygons and the coordinate plane to real-world and mathematical situations. a. Given coordinates of the vertices, draw a polygon in the coordinate plane. b. Find the length of an edge if the vertices have the same x-coordinates or same y-coordinates.	

6.GM.4 Unfold three-dimensional figures into two-dimensional rectangles and triangles (nets) to find the surface area and to solve real-world and mathematical problems.	
6.DS.1 Differentiate between statistical and non-statistical questions.	
6.DS.2 Use center (mean, median, mode), spread (range, interquartile range, mean absolute value), and shape (symmetrical, skewed left, skewed right) to describe the distribution of a set of data collected to answer a statistical question.	Forest in the City
6.DS.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.	
6.DS.4 Select and create an appropriate display for numerical data, including dot plots, histograms, and box plots.	
6.DS.5 Describe numerical data sets in relation to their real-world context. a. State the sample size. b. Describe the qualitative aspects of the data (e.g., how it was measured, units of measurement). c. Give measures of center (median, mean). d. Find measures of variability (interquartile range, mean absolute deviation) using a number line. e. Describe the overall pattern (shape) of the distribution. f. Justify the choices for measure of center and measure of variability based on the shape of the distribution. g. Describe the impact that inserting or deleting a data point has on the measures of center (median, mean) for a data set.	Every Drop Counts Field, Forest, & Stream Forest in the City Reduce, Reuse, Recycle

Grade 6 Reverse Correlations – Mathematics

PLT Activity	Mathematics Standard
Every Drop Counts	6.DS.5
Get Outside	6.EEI.9
Exploration Energy	6.RP.2, 6.RP.3
Field, Forest, & Stream	6.RP.3, 6.DS.5
Forest in the City	6.RP.3, 6.DS.2, 6.DS.5
If You Were the Boss	6.RP.3
Nature's Skyscrapers	6.RP.3, 6.EEI.6
Nothing Succeeds like Succession	6.EEI.9
Our Federal Forests	6.RP.3
Reduce, Reuse, Recycle	6.RP.1, 6.RP.2, 6.RP.3, 6.DS.5
Renewable or Not	6.RP.1, 6.RP.2, 6.RP.3
The Global Climate	6.RP.3, 6.EEI9
What's in a Label	6.RP.3

Grade 6 ELA Standards Correlation to PLT Activities

	Standards	PLT Activities
INQUIRY	Standard 1: Formulate relevant, self-generated questions based on interests and/or needs that can be investigated.	Every Drop Counts Fallen Log Tree Cookies Web of Life Decisions, Decisions Forest in the City
	Standard 2: Transact with texts to formulate questions, propose explanations, and consider alternative views and multiple perspectives.	Trees for Many Reasons(V) Decisions, Decisions Environmental Justice for All If You Were the Boss
	Standard 3: Construct knowledge, applying disciplinary concepts and tools, to build deeper understanding of the world through exploration, collaboration, and analysis.	Energy Exploration Did You Notice (V) Fallen Log Tree Cookies Decisions, Decisions Environmental Justice for All Exploration Energy Forest in the City Improve Your Place Invasive Species
	Standard 4: Synthesize integrated information to share learning and/or take action.	Every Drop Counts Fallen Log Decisions, Decisions Environmental Justice for All Exploration Energy Forest in the City Global Goods (E) Invasive Species Plant a Tree
	Standard 5: Reflect throughout the inquiry process to assess metacognition, broaden understanding, and guide actions, both individually and collaboratively.	

	Standards	PLT Activities
READING: LITERARY TEXT	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.	
	Standard 6: Summarize key details and ideas to support analysis of thematic development.	Trees for Many Reasons(V)
	Standard 7: Analyze the relationship among ideas, themes, or topics in multiple media, formats, and in visual, auditory, and kinesthetic modalities.	

	Standard 8: Analyze characters, settings, events, and ideas as they develop and interact within a particular context.	Trees for Many Reasons(V)
	Standard 9: Interpret and analyze the author's use of words, phrases, and conventions, and how their relationships shape meaning and tone in print and multimedia texts.	Trees for Many Reasons(V)
	Standard 10: Apply a range of strategies to determine and deepen the meaning of known, unknown, and multiple-meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	
	Standard 11: Analyze and provide evidence of how the author's choice of point of view, perspective, and purpose shape content, meaning, and style.	Trees for Many Reasons(V)
	Standard 12: Analyze and critique how the author uses structures in print and multimedia texts to shape meaning and impact the reader.	Trees for Many Reasons(V)
	Standard 13: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

READING: INFORMATIONAL TEXT	**Standards**	**PLT Activities**
	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence and investigating multiple interpretations.	Environmental Justice for All If You Were the Boss Nothing Succeeds like Succession
	Standard 6: Summarize key details and ideas to support analysis of central ideas.	Tree Cookies Environmental Justice for All Exploration Energy Global Goods (E) Invasive Species Life on the Edge
	Standard 7: Research events, topics, ideas, or concepts through multiple media, formats, and in visual, auditory, and kinesthetic modalities.	Charting Biodiversity Tree Cookies Web of Life Environmental Justice for All Exploration Energy Global Goods Invasive Species Life on the Edge Renewable or Not

	Standard 8: Interpret and analyze the author's use of words, phrases, text features, conventions, and structures, and how their relationships shape meaning and tone in print and multimedia texts.	
	Standard 9: Apply a range of strategies to determine the meaning of known, unknown, and multiple meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	Renewable or Not
	Standard 10: Analyze and provide evidence of how the author's choice of purpose and perspective shapes content, meaning, and style.	
	Standard 11: Analyze and critique how the author uses structures in print and multimedia texts to craft informational and argument writing.	
	Standard 12: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

	Standards	**PLT Activities**
WRITING	Standard 1: Write arguments to support claims with clear reasons and relevant evidence.	Global Goods (E) What's in a Label
	Standard 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	Tree Factory Trees in Trouble (V) (E) Water Wonders Web of Life Decisions, Decisions Environmental Justice for All Forest in the City If You Were the Boss Improve Your Place Life on the Edge Nothing Succeeds Like Succession
	Standard 3: Write narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences.	Water Wonders If You Were the Boss
	Standard 4: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	Tree Factory Trees in Trouble (E) Water Wonders Web of Life Decisions, Decisions Environmental Justice for All Global Goods (E) If You Were the Boss Improve Your Place Life on the Edge What's in a Label
	Standard 5: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	Tree Factory Trees in Trouble (E) Water Wonders

		Web of Life Decisions, Decisions Global Goods (E) If You Were the Boss Improve Your Place Life on the Edge What's in a Label
	Standard 6: Write independently, legibly, and routinely for a variety of tasks, purposes, and audiences over short and extended time frames.	Poet Tree (V) Tree Factory Trees in Trouble (E) Water Wonders Web of Life Global Goods (E) If You Were the Boss Improve Your Place What's in a Label

	Standards	**PLT Activities**
COMMUNICATION	Standard 1: Interact with others to explore ideas and concepts, communicate meaning, and develop logical interpretations through collaborative conversations; build upon the ideas of others to clearly express one's own views while respecting diverse perspectives.	Charting Biodiversity Discover Diversity Peek at Packaging (V) Tree Cookies Trees for Many Reasons Decisions, Decisions Environmental Justice for All Exploration Energy Forest in the City If You Were the Boss Improve Your Place Invasive Species Plant a Tree Renew or Not What's in a Label Our Federal Forests
	Standard 2: Articulate ideas, claims, and perspectives in a logical sequence using information, findings, and credible evidence from sources.	Charting Biodiversity Discover Diversity Tree Cookies Decisions, Decisions Environmental Justice for All Energy Exploration The Global Climate If You Were the Boss Improve Your Place Invasive Species Life on the Edge

	Standard 3: Communicate information through strategic use of multiple modalities and multimedia to enrich understanding when presenting ideas and information.	Charting Biodiversity Discover Diversity Poet Tree (V) Decisions, Decisions Environmental Justice for All Energy Exploration The Global Climate If You Were the Boss Improve Your Place Invasive Species Life on the Edge Our Federal Forests Reduce, Reuse, Recycle What's in a Label
	Standard 4: Critique how a speaker addresses content and uses craft techniques that stylistically and structurally inform, engage, and impact audience and convey messages.	Poet Tree (V) Decisions, Decisions Environmental Justice for All Energy Exploration If You Were the Boss Invasive Species Life on the Edge
	Standard 5: Incorporate craft techniques to engage and impact audience and convey messages.	Poet Tree (V) Decisions, Decisions Environmental Justice for All

(V) Variation for 6-8 (E) Enrichment Activity

Grade 6 Reverse Correlations – English Language Arts

PLT Activity	Standard
Charting Biodiversity	6.RI.7, 6.C.1, 6.C.2, 6.C.3,
Discover Diversity	6.C.1, 6.C.2, 6.C.3,
Every Drop Counts	6.I.1, 6.I.4,
Fallen Log	6.I.1, 6.I.3, 6.I.4,
Peek at Packaging (V)	6.C.1,
Poet Tree (V)	6.W.6, 6.C.3, 6.C.4, 6.C.5
Tree Cookies	6.I.1, 6.I.3, 6.RI.6, 6.RI.7, 6.C.1, 6.C.2,
Tree Factory	6.W.2, 6.W.4, 6.W.5, 6.W.6,
Trees for Many Reasons (V)	6.I.2, 6.RL.6, 6.RL.8, 6.RL.9, 6.RL.11, 6.RL.12, 6.C.1,
Trees in Trouble (V) (E)	6.W.2, 6.W.4, 6.W.5, 6.W.6,
Water Wonders	6.W.2, 6.W.3, 6.W.4, 6.W.5, 6.W.5, 6.W.6,
Web of Life	6.I.1, 6.RI.7, 6.W.2, 6.W.4, 6.W.5, 6.W.6,

Decisions, Decisions	6.I.1, 6.I.2, 6.I.3, 6.I.4, 6.W.2, 6.W.4, 6.W.5, 6.C.1, 6.C.2, 6.C.3, 6.C.4, 6.C.5
Environmental Justice for All	6.I.2, 6.I.3, 6.I.4, 6.RI.5, 6.RI.6, 6.RI.7, 6.W.2, 6.W.4, 6.C.1, 6.C.2, 6.C.3, 6.C.4, 6.C.5
Exploration Energy	6.I.3, 6.I.4, 6.RI.6, 6.RI.7, 6.C.1, 6.C.2, 6.C.3, 6.C.4,
Forest in the City	6.I.1, 6.I.3, 6.I.4, 6.W.2, 6.C.1,
Global Goods (E)	6.I.4, 6.RI.6, 6.RI.7, 6.W.1, 6.W.4, 6.W.5, 6.W.6,
If You Were the Boss	6.I.2, 6.RI.5, 6.W.2, 6.W.3, 6.W.4, 6.W.5, 6.W.6, 6.C.1, 6.C.2, 6.C.3, 6.C.4,
Improve Your Place	6.I.3, 6.I.4, 6.W.2, 6.W.4, 6.W.5, 6.W.6, 6.C.1, 6.C.2, 6.C.3,
Invasive Species	6.I.3, 6.I.4, 6.RI.6, 6.RI.7, 6.C.1, 6.C.2, 6.C.3, 6.C.4,
Life on the Edge	6.RI.6, 6.RI.7, 6.W.2, 6.W.4, 6.W.5, 6.C.2, 6.C.3, 6.C.4,
Nothing Succeeds Like Succession	6.RI.5, 6.W.2,
Our Federal Forests	6.C.1, 6.C.3,
Plant a Tree	6.I.4, 6.C.1,
Reduce, Reuse, Recycle	6.C.3,
Renewable or Not	6.I.1, 6.RI.7, 6.RI.9, 6.C.1,
The Global Climate	6.C.2, 6.C.3,
What's in a Label	6.W.1, 6.W.4, 6.W.5, 6.W.6, 6.C.1, 6.C.3,

Grade 6 Social Studies Standards Correlation to PLT Activities

Standards	PLT Activities
Standard 1: Demonstrate an understanding of the organization and transformation(s) of world civilizations to 550.	
6.1.CO Compare the development of social systems among the early river valley civilizations.	
6.1.CE Summarize how environmental factors influenced the interactions within and between early civilizations.	
6.1.P Analyze the shift from early to classical civilizations and the enduring contributions of classical civilizations.	
6.1.CX Contextualize the origins and spread of major world religions and their enduring influence.	
6.1.CC Analyze changes and continuities that influenced the organization and technological advancements of early and classical world civilizations.	
6.1.E Analyze multiple perspectives on the political, intellectual, and social achievements of classical societies through a variety of primary and secondary sources.	
Standard 2: Demonstrate an understanding of the increased global interactions among humans from the end of the classical era to the invention of the printing press (i.e., 550–1450).	
6.2.CO Compare the political systems within world civilizations.	
6.2.CE Explain the impact of global exchanges among world civilizations.	
6.2.P Summarize the increased global exchanges among world societies using the Crusades as a major turning point.	
6.2.CX Contextualize the historical effects of the expansion of the Turks and Mongols on Europe and Asia.	
6.2.CC Evaluate continuities and changes in cultural and economic interactions between societies in both West Africa and the Americas.	
6.2.E Analyze multiple perspectives on the increased interactions among and between world societies through a variety of primary and secondary sources.	
Standard 3: Demonstrate an understanding of the development of the Atlantic World from the invention of the printing press to the Industrial Revolution (i.e., 1450–1760).	

6.3.CO Compare European motivations for exploration and settlement.	
6.3.CE Explain the impact of increased global exchanges on the development of the Atlantic World.	
6.3.P Summarize the impact of the Transatlantic Slave Trade on ideological, political, and social systems in the Atlantic World.	
6.3.CX Contextualize the experience of indigenous peoples due to expansion and the conflict that arose from it.	
6.3.CC Analyze the intellectual, political, and social changes in relation to the idea of individual rights from Humanism to the Enlightenment.	
6.3.E Analyze the short and long term impact of the Atlantic World's growth using primary and secondary sources across multiple perspectives.	
Standard 4: Demonstrate an understanding of how increased global exchanges promoted revolution from 1760 to the beginning of the 20th Century.	
6.4.CO Compare the political revolutions which resulted from the Enlightenment	
6.4.CE Analyze the economic, political, and social impacts of colonialism and the rise of imperialism.	
6.4.P Summarize the local and global impacts of the Industrial Revolution.	
6.4.CX Contextualize the environmental impact of the Industrial Revolution.	
6.4.CC Analyze the progression of nationalism in the 19th through the early 20th century	
6.4.E Analyze multiple perspectives on increased global interactions and revolutions through a variety of primary and secondary sources.	
Standard 5: Demonstrate an understanding of the development of global interdependence from 1920 to the present.	
6.5.CO Compare the global movements that resulted in the advancement or limitation of human rights during the 20th and 21st centuries.	
6.5.CE Explain the impact of nationalism on global conflicts and genocides in the 20th and 21st centuries.	
6.5.P Analyze the impact of increased global interdependence using the Great Depression and Cold War as major turning points in the 20th century.	
6.5.CX Contextualize various sustainability efforts amid increasing global interdependence.	Global Goods The Global Climate
6.5.CC Analyze the progression of technological developments and the resulting cultural diffusion throughout the 20th and 21st centuries.	
6.5.E Analyze multiple perspectives on global interdependence during the 20th and 21st centuries through a variety of primary and secondary sources.	

Grade 6 Reverse Correlations

PLT Activity	Social Studies Standard
Global Goods	6.5.CX
The Global Climate	6.5.CX

GRADE SEVEN STANDARDS

Grade 7 Science Performance Expectations Correlation to PLT Activities

Performance Expectations	PLT Activities
7-PS1-1. Develop models to describe the atomic composition of simple molecules and extended structures	
7-PS1-2. Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.	
7-PS1-3. Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.	Global Goods (Part B)
7-PS1-5. Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.	
7-PS1-6. Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.	
7-PS3-1. Construct and interpret graphical displays of data to describe the proportional relationships of kinetic energy to the mass of an object and to the speed of an object.	
7-PS3-2. Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.	
7-PS3-5. Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.	
7-LS1-6. Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.	Every Tree for Itself Signs of Fall Trees in Trouble Plant a Tree
7-LS1-7. Develop a model to describe how food molecules in plants and animals are rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism.	
7-LS2-1. Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.	Every Tree for Itself Tree Cookies Field, Forest & Stream
7-LS2-2. Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.	
7-LS2-3. Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.	Fallen Log Soil Builders Water Wonders Web of Life Field, Forest & Stream The Global Climate
7-LS2-4. Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.	Trees for Many Reasons Field, Forest & Stream
7-LS2-5. Evaluate competing design solutions for maintaining biodiversity and ecosystem services.	Water Wonders (Part B) Decisions, Decisions If You Were Boss Improve Your Place

	Life on the Edge Our Federal Forests Plant a Tree Reduce, Reuse, Recycle Renewable or Not? The Global Climate
7-ESS3-1. Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.	
7-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.	Trees for Many Reasons Decisions, Decisions Environmental Justice for All If You Were the Boss Life on the Edge Reduce, Reuse, Recycle Renewable or Not? The Global Climate What's in a Label?
7-ESS3-4. Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.	Exploration Energy Global Goods Reduce, Reuse, Recycle Renewable or Not? The Global Climate What's in a Label?
7-ESS3-5. Ask questions to clarify evidence of the factors that have impacted global temperatures over the past century.	The Global Climate

Grade 7 Reverse Correlations – Science

PLT Activity	Science Performance Expectations
Every Tree for Itself	7-LS1-6 7-LS2-1
Fallen Log	7-LS2-3
Signs of Fall	7-LS1-6
Soil Builders	7-LS2-3
Tree Cookies	7-LS2-1
Trees for Many Reasons	7-LS2-4 7-ESS3-3
Trees in Trouble	7-LS1-6
Water Wonders (Part B)	7-LS2-3 7-LS2-5
Web of Life	7-LS2-3
Decisions, Decisions	7-ESS3-3 7-LS2-5
Environmental Justice for All	7-ESS3-3
Exploration Energy	7-ESS3-4
Field, Forest, and Stream	7-LS2-1 7-LS2-3 7-LS2-4

Global goods (Part B)	7-PS1-3 7-ESS3-4
If You Were the Boss	7-ESS3-3 7-LS2-5
Improve your Place	7-LS2-5 (ETS1.B)
Life on the Edge	7-LS2-1 7-ESS3-3 7-LS2-5
Our Federal Forests	7-LS2-5
Plant a Tree	7-LS1-6 7-LS2-5
Reduce, Reuse, Recycle	7-ESS3-3 7-LS2-5 7-ESS3-4
Renewable or Not?	7-ESS3-3 7-LS2-5 7-ESS3-4
The Global Climate	7-LS2-3 7-ESS3-3 7-LS2-5 7-ESS3-4 7-ESS3-5
What's in a Label?	7-ESS3-3 7-ESS3-4

Grade 7 Mathematics Standards Correlation to PLT Activities

Standards	PLT Activities
7.NS.1 Extend prior knowledge of operations with positive rational numbers to add and to subtract all rational numbers and represent the sum or difference on a number line. a. Understand that the additive inverse of a number is its opposite and their sum is equal to zero. b. Understand that the sum of two rational numbers ($p + q$) represents a distance from p on the number line equal to |q| where the direction is indicated by the sign of q. c. Translate between the subtraction of rational numbers and addition using the additive inverse, $p - q = p + (-q)$. d. Demonstrate that the distance between two rational numbers on the number line is the absolute value of their difference. e. Apply mathematical properties (e.g., commutative, associative, distributive, or the properties of identity and inverse elements) to add and subtract rational numbers.	
7.NS.2 Extend prior knowledge of operations with positive rational numbers to multiply and to divide all rational numbers. a. Understand that the multiplicative inverse of a number is its reciprocal and their product is equal to one. b. Understand sign rules for multiplying rational numbers. c. Understand sign rules for dividing rational numbers and that a quotient of integers (with a non-zero divisor) is a rational number. d. Apply mathematical properties (e.g., commutative, associative, distributive, or the properties of identity and inverse elements) to multiply and divide rational numbers. e. Understand that some rational numbers can be written as integers and all rational numbers can be written as fractions or decimal numbers that terminate or repeat.	
7.NS.3 Apply the concepts of all four operations with rational numbers to solve real-world and mathematical problems.	If You Were the Boss Exploration Energy Renewable or Not Nature's Skyscrapers Forest in the City
7.NS.4 Understand and apply the concepts of comparing and ordering to rational numbers. a. Interpret statements using less than (), less than or equal to (≤), greater than or equal to (≥), and equal to (=) as relative locations on the number line. b. Use concepts of equality and inequality to write and explain real-world and mathematical situations.	
7.NS.5 Extend prior knowledge to translate among multiple representations of rational numbers (fractions, decimal numbers, percentages). Exclude the conversion of repeating decimal numbers to fractions.	
7.RP.1 Compute unit rates, including those involving complex fractions, with like or different units.	Exploration Energy Getting Outside If You Were the Boss
7.RP.2 Identify and model proportional relationships given multiple representations, including tables, graphs, equations, diagrams, verbal descriptions, and real-world situations. a. Determine when two quantities are in a proportional relationship. b. Recognize or compute the constant of proportionality. c. Understand that the constant of proportionality is the	Nature's Skyscrapers Field, Forest, & Stream Forest in the City If You Were Boss Our Federal Forests

unit rate. d. Use equations to model proportional relationships. e. Investigate the graph of a proportional relationship and explain the meaning of specific points (e.g., origin, unit rate) in the context of the situation.	Nothing Succeeds like Succession Reduce, Reuse, Recycle Renewable or Not The Global Climate What's in a Label
7.RP.3 Solve real-world and mathematical problems involving ratios and percentages using proportional reasoning (e.g., multi-step dimensional analysis, percent increase/decrease, tax).	Nature's Skyscrapers Nothing Succeeds like Succession Water Wonders
7.EEI.1 Apply mathematical properties (e.g., commutative, associative, distributive) to simplify and to factor linear algebraic expressions with rational coefficients.	
7.EEI.2 Recognize that algebraic expressions may have a variety of equivalent forms and determine an appropriate form for a given real-world situation.	
7.EEI.3 Extend previous understanding of Order of Operations to solve multi-step real-world and mathematical problems involving rational numbers. Include fraction bars as a grouping symbol.	
7.EEI.4 Apply the concepts of linear equations and inequalities in one variable to real-world and mathematical situations. a. Write and fluently solve linear equations of the form $ax + b = c$ and $a(x + b) = c$ where a, b, and c are rational numbers. b. Write and solve multi-step linear equations that include the use of the distributive property and combining like terms. Exclude equations that contain variables on both sides. c. Write and solve two-step linear inequalities. Graph the solution set on a number line and interpret its meaning. d. Identify and justify the steps for solving multi-step linear equations and two-step linear inequalities.	
7.EEI.5 Understand and apply the laws of exponents (i.e., product rule, quotient rule, power to a power, product to a power, quotient to a power, zero power property) to simplify numerical expressions that include whole-number exponents.	
7.GM.1 Determine the scale factor and translate between scale models and actual measurements (e.g., lengths, area) of real-world objects and geometric figures using proportional reasoning.	
7.GM.2 Construct triangles and special quadrilaterals using a variety of tools (e.g., freehand, ruler and protractor, technology). a. Construct triangles given all measurements of either angles or sides. b. Decide if the measurements determine a unique triangle, more than one triangle, or no triangle. c. Construct special quadrilaterals (i.e., kite, trapezoid, isosceles trapezoid, rhombus, parallelogram, rectangle) given specific parameters about angles or sides.	
7.GM.3 Describe two-dimensional cross-sections of three-dimensional figures, specifically right rectangular prisms and right rectangular pyramids	
7.GM.4 Investigate the concept of circles. a. Demonstrate an understanding of the proportional relationships between diameter, radius, and circumference of a circle. b. Understand that the constant of proportionality between the circumference and diameter is equivalent to π. c. Explore the relationship between circumference and area using a visual model. d. Use the formulas for circumference and area of circles appropriately to solve real-world and mathematical problems.	
7.GM.5 Write equations to solve problems involving the relationships between angles formed by two intersecting lines, including supplementary, complementary, vertical, and adjacent.	
7.GM.6 Apply the concepts of two- and three-dimensional figures to real-world and mathematical situations. a. Understand that the concept of area is applied to two-dimensional figures such as triangles, quadrilaterals, and polygons. b. Understand that the concepts of volume and surface area are applied to three dimensional figures such as cubes, right rectangular prisms, and right triangular prisms. c. Decompose cubes, right rectangular prisms, and right triangular prisms into rectangles and triangles to derive the formulas for volume and surface area. d. Use the formulas for area, volume, and surface area appropriately.	Nature's Skyscrapers
7.DSP.1* Investigate concepts of random sampling. a. Understand that a sample is a subset of a population and both possess the same characteristics. b. Differentiate between random and non-random sampling. c. Understand that generalizations from a sample are valid only if the sample is representative of the population. d. Understand that random sampling is used to gather a representative sample and supports valid inferences about the population.	

7.DSP.2* Draw inferences about a population by collecting multiple random samples of the same size to investigate variability in estimates of the characteristic of interest.	Forest in a City Every Drop Counts Discover Diversity
7.DSP.3 Visually compare the centers, spreads, and overlap of two displays of data (i.e., dot plots, histograms, box plots) that are graphed on the same scale and draw inferences about this data.	
7.DSP.4* Compare the numerical measures of center (mean, median, mode) and variability (range, interquartile range, mean absolute deviation) from two random samples to draw inferences about the populations.	
7.DSP.5 Investigate the concept of probability of chance events. a. Determine probabilities of simple events. b. Understand that probability measures likelihood of a chance event occurring. c. Understand that the probability of a chance event is a number between 0 and 1. d. Understand that a probability closer to 1 indicates a likely chance event. e. Understand that a probability close to 1 2 indicates that a chance event is neither likely nor unlikely. f. Understand that a probability closer to 0 indicates an unlikely chance event.	
7.DSP.6* Investigate the relationship between theoretical and experimental probabilities for simple events. a. Determine approximate outcomes using theoretical probability. b. Perform experiments that model theoretical probability. c. Compare theoretical and experimental probabilities.	
7.DSP.7* Apply the concepts of theoretical and experimental probabilities for simple events. a. Differentiate between uniform and non-uniform probability models (distributions). b. Develop both uniform and non-uniform probability models. c. Perform experiments to test the validity of probability models.	
7.DSP.8* Extend the concepts of simple events to investigate compound events. a. Understand that the probability of a compound event is between 0 and 1. b. Identify the outcomes in a sample space using organized lists, tables, and tree diagrams. c. Determine probabilities of compound events using organized lists, tables, and tree diagrams. d. Design and use simulations to collect data and determine probabilities. e. Compare theoretical and experimental probabilities for compound events.	

Grade 7 Reverse Correlations – Mathematics

PLT Activity	Mathematics Standard
Discover Diversity	7.DSP.2
Every Drop Counts	7.DSP.2
Getting Outside	7.RP.1
Water Wonders	7.RP.3
Exploration Energy	7.NS3, 7.RP.1
Field, Forest, & Stream	7.RP.2
Forest in the City	7DSP.2, 7.NS.3, 7.RP.2
If You Were the Boss	7.NS.3, 7.RP.1, 7.RP.2
Nature's Skyscrapers	7.GM.6, 7.NS.3, 7.RP.2, 7.RP.3
Nothing Succeeds like Succession	7.RP.2, 7.RP.3
Our Federal Forests	7.RP.2
Reduce, Reuse, Recycle	7.RP.2
Renewable or Not	7.NS.3, 7.RP.2
The Global Climate	7.RP.2
What's in a Label	7.RP.2

Grade 7 ELA Standards Correlation to PLT Activities

	Standards	PLT Activities
INQUIRY	Standard 1: Formulate relevant, self-generated questions based on interests and/or needs that can be investigated.	Every Drop Counts Fallen Log Tree Cookies Web of Life Decisions, Decisions Forest in the City
	Standard 2: Transact with texts to formulate questions, propose explanations, and consider alternative views and multiple perspectives.	Trees for Many Reasons(V) Decisions, Decisions Environmental Justice for All If You Were the Boss
	Standard 3: Construct knowledge, applying disciplinary concepts and tools, to build deeper understanding of the world through exploration, collaboration, and analysis.	Energy Exploration Did You Notice (V) Fallen Log Tree Cookies Decisions, Decisions Environmental Justice for All Exploration Energy Forest in the City Improve Your Place Invasive Species
	Standard 4: Synthesize integrated information to share learning and/or take action.	Every Drop Counts Fallen Log Decisions, Decisions Environmental Justice for All Exploration Energy Forest in the City Global Goods (E) Invasive Species Plant a Tree
	Standard 5: Reflect throughout the inquiry process to assess metacognition, broaden understanding, and guide actions, both individually and collaboratively.	

	Standards	PLT Activities
READING: LITERARY TEXT	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.	
	Standard 6: Summarize key details and ideas to support analysis of thematic development.	Trees for Many Reasons(V)
	Standard 7: Analyze the relationship among ideas, themes, or topics in multiple media, formats, and in visual, auditory, and kinesthetic modalities.	

	Standard 8: Analyze characters, settings, events, and ideas as they develop and interact within a particular context.	Trees for Many Reasons(V)
	Standard 9: Interpret and analyze the author's use of words, phrases, and conventions, and how their relationships shape meaning and tone in print and multimedia texts.	Trees for Many Reasons(V)
	Standard 10: Apply a range of strategies to determine and deepen the meaning of known, unknown, and multiple-meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	
	Standard 11: Analyze and provide evidence of how the author's choice of point of view, perspective, and purpose shape content, meaning, and style.	Trees for Many Reasons(V)
	Standard 12: Analyze and critique how the author uses structures in print and multimedia texts to shape meaning and impact the reader.	Trees for Many Reasons(V)
	Standard 13: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

READING: INFORMATIONAL TEXT	**Standards**	**PLT Activities**
	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence and investigating multiple interpretations.	Environmental Justice for All If You Were the Boss Nothing Succeeds like Succession
	Standard 6: Summarize key details and ideas to support analysis of central ideas.	Tree Cookies Environmental Justice for All Exploration Energy Global Goods (V) Invasive Species Life on the Edge
	Standard 7: Research events, topics, ideas, or concepts through multiple media, formats, and in visual, auditory, and kinesthetic modalities.	Charting Biodiversity Tree Cookies Web of Life Environmental Justice for All Exploration Energy Global Goods Invasive Species Life on the Edge Renewable or Not

	Standard 8: Interpret and analyze the author's use of words, phrases, text features, conventions, and structures, and how their relationships shape meaning and tone in print and multimedia texts.	
	Standard 9: Apply a range of strategies to determine the meaning of known, unknown, and multiple meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	Renewable or Not
	Standard 10: Analyze and provide evidence of how the author's choice of purpose and perspective shapes content, meaning, and style.	
	Standard 11: Analyze and critique how the author uses structures in print and multimedia texts to craft informational and argument writing.	
	Standard 12: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

	Standards	**PLT Activities**
WRITING	Standard 1: Write arguments to support claims with clear reasons and relevant evidence.	Global Goods (E) What's in a Label
	Standard 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	Trees in Trouble (V) (E) Water Wonders Web of Life Decisions, Decisions Environmental Justice for All Forest in the City If You Were the Boss Improve Your Place Life on the Edge Nothing Succeeds Like Succession
	Standard 3: Write narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences.	Water Wonders If You Were the Boss
	Standard 4: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	Trees in Trouble (E) Water Wonders Web of Life Decisions, Decisions Environmental Justice for All Global Goods (E) If You Were the Boss Improve Your Place Life on the Edge What's in a Label
	Standard 5: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	Trees in Trouble (E) Water Wonders Web of Life Decisions, Decisions Global Goods (E)

		If You Were the Boss Improve Your Place Life on the Edge What's in a Label
	Standard 6: Write independently, legibly, and routinely for a variety of tasks, purposes, and audiences over short and extended time frames.	Poet Tree (V) Trees in Trouble (E) Water Wonders Web of Life Global Goods (E) If You Were the Boss Improve Your Place What's in a Label

	Standards	**PLT Activities**
COMMUNICATION	Standard 1: Interact with others to explore ideas and concepts, communicate meaning, and develop logical interpretations through collaborative conversations; build upon the ideas of others to clearly express one's own views while respecting diverse perspectives.	Charting Biodiversity Discover Diversity Peek at Packaging (V) Tree Cookies Trees for Many Reasons Decisions, Decisions Environmental Justice for All Exploration Energy Forest in the City If You Were the Boss Improve Your Place Invasive Species Plant a Tree Renew or Not What's in a Label Our Federal Forests
	Standard 2: Articulate ideas, claims, and perspectives in a logical sequence using information, findings, and credible evidence from sources.	Charting Biodiversity Discover Diversity Tree Cookies Decisions, Decisions Environmental Justice for All Energy Exploration The Global Climate If You Were the Boss Improve Your Place Invasive Species Life on the Edge
	Standard 3: Communicate information through strategic use of multiple modalities and multimedia to enrich understanding when presenting ideas and information.	Charting Biodiversity Discover Diversity Poet Tree (V) Decisions, Decisions

		Environmental Justice for All Energy Exploration The Global Climate If You Were the Boss Improve Your Place Invasive Species Life on the Edge Our Federal Forests Reduce, Reuse, Recycle What's in a Label
	Standard 4: Critique how a speaker addresses content and uses craft techniques that stylistically and structurally inform, engage, and impact audience and convey messages.	Poet Tree (V) Decisions, Decisions Environmental Justice for All Energy Exploration If You Were the Boss Invasive Species Life on the Edge
	Standard 5: Incorporate craft techniques to engage and impact audience and convey messages.	Poet Tree (V) Decisions, Decisions Environmental Justice for All

(V) Variation for 6-8 (E) Enrichment Activity

Grade 7 Reverse Correlations – English Language Arts

PLT Activity	Standard
Charting Biodiversity	7.RI.7, 7.C.1, 7.C.2,7.C.3
Discover Diversity	7.C.1, 7.C.2, 7.C.3
Every Drop Counts	7.I.1, 7.1.4
Fallen Log	7.I.1, 7.I.3, 7.I.4
Peek at Packaging (V)	7.C.1
Poet Tree (V)	7.W.6, 7.C.3, 7.C.4, 7.C.5
Tree Cookies	7.I.1, 7.I.3, 7.RI.6, 7.RI.7, 7.C.1, 7.C.2
Trees for Many Reasons (V)	7.I.2, 7.RL.6, 7.RL.8, 7.RL.9, 7.RL.11, 7.RL.12, 7.C1
Trees in Trouble (V) (E)	7.W.2, 7.W.4, 7.W.5, 7.W.6
Water Wonders	7.W.2, 7.W.3, 7.W.4, 7.W.5, 7.W.6
Web of Life	7.I.1, 7.RI.7, 7.W.2, 7.W.4, 7.W.5, 7.W.6
Decisions, Decisions	7.I.1, 7.I.2, 7.I.3, 7.I.4, 7.W.2, 7.W.4, 7.W.5, 7.C.1, 7.C.2, 7.C.3, 7.C.4, 7.C.5
Environmental Justice for All	7.I.2, 7.I.3, 7.I.4, 7.RI.5, 7.RI.6, 7.RI.7, 7.W.2, 7.W.4, 7.C.1, 7.C.2, 7.C.3, 7.C.4, 7.C.5
Exploration Energy	7.I.3, 7.I.4, 7.RI.6, 7.RI.7, 7.C.1, 7.C.2, 7.C.3, 7.C.4
Forest in the City	7.I.1, 7.I.3, 7.I.4, 7.W.2, 7.C.1

Global Goods (E)	7.I.4, 7.RI.6, 7.RI.7, 7.W.1, 7.W.4, 7.W.5, 7.W.6
If You Were the Boss	7.I.2, 7.RI.5, 7.W.2, 7.W.3, 7.W.4, 7.W.5, 7.W.6, 7.C.1,7.C.2, 7.C.3, 7.C.4
Improve Your Place	7.I.3, 7.I.4, 7.W.2, 7.W.4, 7.W.5, 7.W.6, 7.C.1, 7.C.2, 7.C.3
Invasive Species	7.I.3, 7.I.4, 7.RI.6, 7.RI.7, 7.C.1,7.C.2, 7.C.3, 7.C.4
Life on the Edge	7.RI.6, 7.RI.7, 7.W.2, 7.W.4, 7.W.5, 7.C.2, 7.C.3, 7.C.4
Nothing Succeeds Like Succession	7.RI.5, 7.W.2
Our Federal Forests	7.C.1, 7.C.3
Plant a Tree	7.I.4, 7.C.1
Reduce, Reuse, Recycle	7.C.3
Renewable or Not	7.I.1, 7.RI.7, 7.RI.9, 7.C.1
The Global Climate	7.C.2, 7.C.3
What's in a Label	7.W.1, 7.W.4, 7.W.5, 7.W.6, 7.C.1, 7.C.3

Grade 7 Social Studies Standards Correlation to PLT Activities

Standards	PLT Activities
Standard 1: Analyze the cultural, economic, environmental, physical, political, and population geographies of contemporary **Africa**	
7.1.1.PR Identify select African physical systems and human characteristics of places.	
7.1.2.ER Identify climate and vegetation regions of Africa and the spatial distributions and patterns of natural resources, including the impact of their location on human activities.	
7.1.3.HS Explain Africa's current human population distributions and patterns, and use geographic models to compare the conditions driving migration and demographic change.	
7.1.4.HS Compare and contrast the dynamic physical and human conditions that lead to the creation of ethnic, gender, language, and religious landscapes of African societies.	
7.1.5.HS Identify and analyze the current political borders using maps, and explain the connections between African places and other continents based upon factors such as colonialism, imperialism, independence movements, and regional alliances.	
7.1.6.AG Gather evidence and construct a map or model to investigate a significant contemporary cultural, economic, or political issue facing Africa at the local, regional, or global scale.	
Standard 2: Analyze the cultural, economic, environmental, physical, political, and population geographies of contemporary **Asia.**	
7.2.1.PR Identify select Asian physical systems and human characteristics of places.	
7.2.2.ER Identify climate and vegetation regions of Asia and the spatial distributions and patterns of natural resources, including the impact of their location on human activities.	
7.2.3.HS Explain Asia's current human population distributions and patterns, and use geographic models to compare the conditions driving migration and demographic change.	
7.2.4.HS Compare and contrast the physical and human conditions that lead to the creation of dynamic ethnic, gender, language, and religious landscapes of Asian societies.	
7.2.5.HS Identify and analyze the current political borders using maps, and explain the economic, political, and social connections between Asian places and other continents.	
7.2.6.AG Gather evidence and construct a map or model to investigate a significant contemporary cultural, economic, or political issue facing Asia at the local, regional, or global scale.	
Standard 3: Analyze the cultural, economic, environmental, physical, political, and population geographies of contemporary **Australia, Oceania, and Antarctica**	
7.3.1.PR Identify select Australia, Oceania, and Antarctica physical systems and human characteristics of places.	
7.3.2.ER Identify climate and vegetation regions and the spatial distributions and patterns of natural resources, including the impact of their location on human activities.	
7.3.3.HS Explain the current human population distributions and patterns of Australia, Oceania, and Antarctica, and use geographic models to compare the conditions driving migration and demographic change.	

7.3.4.HS Compare and contrast the dynamic physical and human conditions that lead to the creation of ethnic, gender, language, and religious landscapes of Australia, Oceania, and Antarctica.	
7.3.5.HS Identify and analyze the current political boarders using maps, and explain resource relationships between Australia, Oceania, and Antarctica and other continents different culture groups throughout history.	
Standard 4: Analyze the cultural, economic, environmental, physical, political, and population geographies of contemporary **Europe.**	
7.4.1.PR Identify select European physical systems and human characteristics of places.	
7.4.2.ER Identify climate and vegetation regions and the spatial distributions and patterns of natural resources, including the impact of their location on human activities.	
7.4.3.HS Explain Europe's current human population distributions and patterns, and use geographic models to compare the conditions driving migration and demographic change.	
7.4.3.HS Explain Europe's current human population distributions and patterns, and use geographic models to compare the conditions driving migration and demographic change	
7.4.4.HS Compare and contrast the dynamic physical and human conditions that lead to the creation of ethnic, gender, language, and religious landscapes of European societies.	
7.4.5.HS Identify and analyze the current political borders using maps, and explain the connections between European countries based upon centripetal and centrifugal forces, as well as connections between European places and other continents.	
7.4.6.AG Gather evidence and construct a map or model to investigate a significant contemporary cultural, economic, or political issue facing Europe at the local, regional, or global scale.	
Standard 5: Analyze the cultural, economic, environmental, physical, political, and population geographies of contemporary **North America.**	
7.5.1.PR Identify select North American physical systems and human characteristics of places.	
7.5.2.ER Identify climate and vegetation regions and the spatial distributions and patterns of natural resources, including the impact of their location on human activities.	
7.5.3.HS Explain North America's current human population distributions and patterns, and use geographic models to compare the conditions driving migration and demographic change.	
7.5.4.HS Compare and contrast the dynamic physical and human conditions that lead to the creation of ethnic, gender, language, and religious landscapes of North American societies.	
7.5.5.HS Identify and analyze the current political borders using maps, explain the economic, political, and social inequalities present in North American societies, and explain the connections between North American places and other continents.	
7.5.6.AG Gather evidence and construct a map or model to investigate a significant contemporary cultural, economic, or political issue facing North America at the local, regional, or global scale.	Decisions, Decisions Global Goods The Global Climate What's in a Label
Standard 6: Analyze the cultural, economic, environmental, physical, political, and population geographies of contemporary **South America.**	
7.6.1.PR Identify select South American physical systems (e.g., landforms and bodies of water), and human characteristics of places (e.g., countries and cities).	
7.6.2.ER Identify climate and vegetation regions and the spatial distributions and patterns of natural resources, including the impact of their location on human activities.	
7.6.3.HS Explain South America's current human population distributions and patterns, and use geographic models to compare the conditions driving migration and demographic change.	
7.6.4.HS Compare and contrast the dynamic physical and human conditions that lead to the creation of ethnic, gender, language, and religious landscapes of South American societies.	
7.6.5.HS Identify and analyze the current political borders using maps, explain the economic, political, and social inequalities present in South American societies, and explain the connections between South American places and other continents.	
7.6.6.AG Gather evidence and construct a map or model to investigate a significant contemporary cultural, economic, or political issue facing South America at the local, regional, or global scale.	

Grade 7 Reverse Correlations - Social Studies

PLT Activity	Social Studies Standard
Decisions, Decisions	7.5.6.AG
Global Goods	7.5.6.AG
The Global Climate	7.5.6.AG
What's in a Label	7.5.6.AG

GRADE EIGHT STANDARDS

Grade 8 Science Performance Expectations Correlation to PLT Activities

Performance Expectations	PLT Activities
8-PS2-1. Apply Newton's third law to design a solution to a problem involving the motion of two colliding objects.	
8-PS2-2. Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object.	
8-PS2-3. Analyze and interpret data to determine the factors that affect the strength of electric and magnetic forces.	
8-PS2-4. Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the masses of interacting objects and the distance between them	
8-PS2-5. Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.	
8-PS4-1. Using mathematical representations, describe a simple model for waves that includes how the amplitude of a wave is related to the energy in a wave.	
8-PS4-3. Communicate information to support the claim that digital devices are used to improve our understanding of how waves transmit information.	
8-LS1-4. Use arguments, based on empirical evidence and scientific reasoning, to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.	Have Seeds, Will Travel
8-LS1-5. Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.	Here We Grow Again Every Tree for Itself Tree Cookies Trees in Trouble Field, Forest & Stream Life on the Edge
8-LS3-1. Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism.	
8-LS3-2. Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.	
8-LS4-1. Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws operated in the past as they do today.	
8-LS4-2. Apply scientific ideas to construct an explanation for the anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer their ancestral relationships.	
8-LS4-4. Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individual's probability of surviving and reproducing in a specific environment.	
8-LS4-5. Gather and synthesize information about technologies that have changed the way humans influence the inheritance of desired traits in organisms.	

8-LS4-6. Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time.	
8-ESS1-1. Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, tides, and seasons.	
8-ESS1-2. Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system.	
8-ESS1-3. Evaluate information to determine scale properties of objects in the solar system.	

Grade 8 Reverse Correlations – Science

PLT Activity	Science Performance Expectations
Have Seed, Will Travel	8-LS1-4
Here We Grow Again	8-LS1-5
Every Tree for Itself	8-LS1-5
Tree Cookies	8-LS1-5
Trees in Trouble	8-LS1-5
Field, Forest, and Stream	8-LS1-5
Life on the Edge	8-LS1-5

Grade 8 Mathematics Standards Correlation to PLT Activities

Standards	PLT Activities
8.NS.1 Explore the real number system and its appropriate usage in real-world situations. a. Recognize the differences between rational and irrational numbers. b. Understand that all real numbers have a decimal expansion. c. Model the hierarchy of the real number system, including natural, whole, integer, rational, and irrational numbers.	Exploration Energy If You Were the Boss Nature's Skyscrapers Reduce, Reuse, Recycle The Global Climate
8.NS.2 Estimate and compare the value of irrational numbers by plotting them on a number line.	
8.NS.3 Extend prior knowledge to translate among multiple representations of rational numbers (fractions, decimal numbers, percentages). Include the conversion of repeating decimal numbers to fractions.	
8.F.1 Explore the concept of functions. a. Understand that a function assigns to each input exactly one output. b. Relate inputs (x-values or domain) and outputs (y-values or range) to independent and dependent variables. c. Translate among the multiple representations of a function, including mappings, tables, graphs, equations, and verbal descriptions. d. Determine if a relation is a function using multiple representations, including mappings, tables, graphs, equations, and verbal descriptions. e. Graph a function from a table of values. Understand that the graph and table both represent a set of ordered pairs of that function.	
8.F.2 Compare multiple representations of two functions, including mappings, tables, graphs, equations, and verbal descriptions, in order to draw conclusions.	
8.F.3 Investigate the differences between linear and nonlinear functions using multiple representations (i.e., tables, graphs, equations, and verbal descriptions). a. Define an equation in slope-intercept form ($y = mx + b$) as being a linear function. b. Recognize that the graph of a linear function has a constant rate of change. c. Provide examples of nonlinear functions.	
8.F.4 Apply the concepts of linear functions to real-world and mathematical situations. a. Understand that the slope is the constant rate of change and the y-intercept is the point where $x = 0$. b. Determine the slope and the y-intercept of a linear function given multiple representations, including two points, tables, graphs, equations, and verbal descriptions. c. Construct a function in slope-intercept form that models a linear relationship between two quantities. d. Interpret the meaning of the slope and the y-	

intercept of a linear function in the context of the situation. e. Explore the relationship between linear functions and arithmetic sequences.	
8.F.5 Apply the concepts of linear and nonlinear functions to graphs in real-world and mathematical situations. a. Analyze and describe attributes of graphs of functions (e.g., constant, increasing/decreasing, linear/nonlinear, maximum/minimum, discrete/continuous). b. Sketch the graph of a function from a verbal description. c. Write a verbal description from the graph of a function with and without scales	
8.EEI.1 Understand and apply the laws of exponents (i.e., product rule, quotient rule, power to a power, product to a power, quotient to a power, zero power property, negative exponents) to simplify numerical expressions that include integer exponents.	
8.EEI.2 Investigate concepts of square and cube roots. a. Find the exact and approximate solutions to equations of the form x 2 = p and x 3 = p where p is a positive rational number. b. Evaluate square roots of perfect squares. c. Evaluate cube roots of perfect cubes. d. Recognize that square roots of non-perfect squares are irrational.	
8.EEI.3 Explore the relationship between quantities in decimal and scientific notation. a. Express very large and very small quantities in scientific notation in the form $a \times 10b = p$ where $1 \leq a < 10$ and b is an integer. b. Translate between decimal notation and scientific notation. c. Estimate and compare the relative size of two quantities in scientific notation.	
8.EEI.4 Apply the concepts of decimal and scientific notation to solve real-world and mathematical problems. a. Multiply and divide numbers expressed in both decimal and scientific notation. b. Select appropriate units of measure when representing answers in scientific notation. c. Translate how different technological devices display numbers in scientific notation.	Water Wonders
8.EEI.5 Apply concepts of proportional relationships to real-world and mathematical situations. a. Graph proportional relationships. b. Interpret unit rate as the slope of the graph. c. Compare two different proportional relationships given multiple representations, including tables, graphs, equations, diagrams, and verbal descriptions.	Field, Forest, & Stream Forest in the City If You Were the Boss Nature's Skyscrapers Reduce, Reuse, Recycle Renewable or Not What's in a Label
8.EEI.6 Apply concepts of slope and y-intercept to graphs, equations, and proportional relationships. a. Explain why the slope, m, is the same between any two distinct points on a nonvertical line using similar triangles. b. Derive the slope-intercept form ($y = mx + b$) for a non-vertical line. c. Relate equations for proportional relationships ($y = kx$) with the slope-intercept form ($y = mx + b$) where $b = 0$.	
8.EEI.7 Extend concepts of linear equations and inequalities in one variable to more complex multi-step equations and inequalities in real-world and mathematical situations. a. Solve linear equations and inequalities with rational number coefficients that include the use of the distributive property, combining like terms, and variables on both sides. b. Recognize the three types of solutions to linear equations: one solution ($x = a$), infinitely many solutions ($a = a$), or no solutions ($a = b$). c. Generate linear equations with the three types of solutions. d. Justify why linear equations have a specific type of solution.	Nature's Skyscrapers
8.EEI.8 Investigate and solve real-world and mathematical problems involving systems of linear equations in two variables with integer coefficients and solutions. a. Graph systems of linear equations and estimate their point of intersection. b. Understand and verify that a solution to a system of linear equations is represented on a graph as the point of intersection of the two lines. c. Solve systems of linear equations algebraically, including methods of substitution and elimination, or through inspection. d. Understand that systems of linear equations can have one solution, no solution, or infinitely many solutions.	
8.GM.1 Investigate the properties of rigid transformations (rotations, reflections, translations) using a variety of tools (e.g., grid paper, reflective devices, graphing paper, technology). a. Verify that lines are mapped to lines, including parallel lines. b. Verify that corresponding angles are congruent. c. Verify that corresponding line segments are congruent.	
8.GM.2 Apply the properties of rigid transformations (rotations, reflections, translations). a. Rotate geometric figures 90, 180, and 270 degrees, both clockwise and counterclockwise, about the origin. b.	

Reflect geometric figures with respect to the x-axis and/or y-axis. c. Translate geometric figures vertically and/or horizontally. d. Recognize that two-dimensional figures are only congruent if a series of rigid transformations can be performed to map the pre-image to the image. e. Given two congruent figures, describe the series of rigid transformations that justifies this congruence.	
8.GM.3 Investigate the properties of transformations (rotations, reflections, translations, dilations) using a variety of tools (e.g., grid paper, reflective devices, graphing paper, dynamic software). a. Use coordinate geometry to describe the effect of transformations on two dimensional figures. b. Relate scale drawings to dilations of geometric figures	
8.GM.4 Apply the properties of transformations (rotations, reflections, translations, dilations). a. Dilate geometric figures using scale factors that are positive rational numbers. b. Recognize that two-dimensional figures are only similar if a series of transformations can be performed to map the pre-image to the image. c. Given two similar figures, describe the series of transformations that justifies this similarity. d. Use proportional reasoning to find the missing side lengths of two similar figures.	
8.GM.5 Extend and apply previous knowledge of angles to properties of triangles, similar figures, and parallel lines cut by a transversal. a. Discover that the sum of the three angles in a triangle is 180 degrees. b. Discover and use the relationship between interior and exterior angles of a triangle. c. Identify congruent and supplementary pairs of angles when two parallel lines are cut by a transversal. d. Recognize that two similar figures have congruent corresponding angles.	
8.GM.6 Use models to demonstrate a proof of the Pythagorean Theorem and its converse.	
8.GM.7 Apply the Pythagorean Theorem to model and solve real-world and mathematical problems in two and three dimensions involving right triangles.	
8.GM.8 Find the distance between any two points in the coordinate plane using the Pythagorean Theorem.	
8.GM.9 Solve real-world and mathematical problems involving volumes of cones, cylinders, and spheres and the surface area of cylinders	
8.DSP.1 Investigate bivariate data. a. Collect bivariate data. b. Graph the bivariate data on a scatter plot. c. Describe patterns observed on a scatter plot, including clustering, outliers, and association (positive, negative, no correlation, linear, nonlinear).	The Global Climate
8.DSP.2 Draw an approximate line of best fit on a scatter plot that appears to have a linear association and informally assess the fit of the line to the data points.	
8.DSP.3 Apply concepts of an approximate line of best fit in real-world situations. a. Find an approximate equation for the line of best fit using two appropriate data points. b. Interpret the slope and intercept. c. Solve problems using the equation.	
8.DSP.4* Investigate bivariate categorical data in two-way tables. a. Organize bivariate categorical data in a two-way table. b. Interpret data in two-way tables using relative frequencies. c. Explore patterns of possible association between the two categorical variables.	Forest in the City Our Federal Forests Reduce, Reuse, Recycle Renewable or Not The Global Climate Every Drop Counts
8.DSP.5* Organize data in matrices with rational numbers and apply to real-world and mathematical situations. a. Understand that a matrix is a way to organize data. b. Recognize that a $m \times n$ matrix has m rows and n columns. c. Add and subtract matrices of the same size. d. Multiply a matrix by a scalar.	

Grade 8 Reverse Correlations – Mathematics

PLT Activity	Mathematics Standard
Every Drop Counts	8.DSP.4
Water Wonders	8.EEI.4
Exploration Energy	8.NS.1
Field, Forest, & Stream	8.EEI.5
Forest in the City	8.EEI.5, 8.DSP.4
If You Were the Boss	8.NS.1, 8.EEI.5

Nature's Skyscrapers	8.NS.1, 8.EEI.5, 8.EEI.7
Our Federal Forests	8.DSP.4
Reduce, Reuse, Recycle	8.NS.1, 8.EEI.5, 8.DSP.4
Renewable or Not	8.EEI.5, 8.DSP.4
The Global Climate	8.NS.1, 8.DSP.1, 8.DSP.4
What's in a Label	8.EEI.5

Grade 8 ELA Standards Correlation to PLT Activities

	Standards	PLT Activities
INQUIRY	Standard 1: Formulate relevant, self-generated questions based on interests and/or needs that can be investigated.	Every Drop Counts Fallen Log Tree Cookies Web of Life Decisions, Decisions Forest in the City
	Standard 2: Transact with texts to formulate questions, propose explanations, and consider alternative views and multiple perspectives.	Trees for Many Reasons(V) Decisions, Decisions Environmental Justice for All If You Were the Boss
	Standard 3: Construct knowledge, applying disciplinary concepts and tools, to build deeper understanding of the world through exploration, collaboration, and analysis.	Energy Exploration Did You Notice (V) Fallen Log Tree Cookies Decisions, Decisions Environmental Justice for All Exploration Energy Forest in the City Improve Your Place Invasive Species
	Standard 4: Synthesize integrated information to share learning and/or take action.	Every Drop Counts Fallen Log Decisions, Decisions Environmental Justice for All Exploration Energy Forest in the City Global Goods (E) Invasive Species Plant a Tree
	Standard 5: Reflect throughout the inquiry process to assess metacognition, broaden understanding, and guide actions, both individually and collaboratively.	

READING: LITERARY TEXT	Standards	PLT Activities
	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.	
	Standard 6: Summarize key details and ideas to support analysis of thematic development.	Trees for Many Reasons(V)
	Standard 7: Analyze the relationship among ideas, themes, or topics in multiple media, formats, and in visual, auditory, and kinesthetic modalities.	
	Standard 8: Analyze characters, settings, events, and ideas as they develop and interact within a particular context.	Trees for Many Reasons(V)
	Standard 9: Interpret and analyze the author's use of words, phrases, and conventions, and how their relationships shape meaning and tone in print and multimedia texts.	Trees for Many Reasons(V)
	Standard 10: Apply a range of strategies to determine and deepen the meaning of known, unknown, and multiple-meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	
	Standard 11: Analyze and provide evidence of how the author's choice of point of view, perspective, and purpose shape content, meaning, and style.	Trees for Many Reasons(V)
	Standard 12: Analyze and critique how the author uses structures in print and multimedia texts to shape meaning and impact the reader.	Trees for Many Reasons(V)
	Standard 13: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

READING: INFORMATIONAL TEXT	Standards	PLT Activities
	Standard 1: Demonstrate understanding of the organization and basic features of print.	
	Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.	
	Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.	
	Standard 4: Read with sufficient accuracy and fluency to support comprehension.	
	Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence and investigating multiple interpretations.	Environmental Justice for All If You Were the Boss Nothing Succeeds like Succession
	Standard 6: Summarize key details and ideas to support analysis of central ideas.	Tree Cookies Environmental Justice for All Exploration Energy Global Goods (E) Invasive Species

		Life on the Edge
	Standard 7: Research events, topics, ideas, or concepts through multiple media, formats, and in visual, auditory, and kinesthetic modalities.	Charting Biodiversity Tree Cookies Web of Life Environmental Justice for All Exploration Energy Global Goods Invasive Species Life on the Edge Renewable or Not
	Standard 8: Interpret and analyze the author's use of words, phrases, text features, conventions, and structures, and how their relationships shape meaning and tone in print and multimedia texts.	
	Standard 9: Apply a range of strategies to determine the meaning of known, unknown, and multiple meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.	Renewable or Not
	Standard 10: Analyze and provide evidence of how the author's choice of purpose and perspective shapes content, meaning, and style.	
	Standard 11: Analyze and critique how the author uses structures in print and multimedia texts to craft informational and argument writing.	
	Standard 12: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.	

	Standards	**PLT Activities**
WRITING	Standard 1: Write arguments to support claims with clear reasons and relevant evidence.	Global Goods (E) What's in a Label
	Standard 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	Trees in Trouble (V) (E) Water Wonders Web of Life Decisions, Decisions Environmental Justice for All Forest in the City If You Were the Boss Improve Your Place Life on the Edge Nothing Succeeds Like Succession
	Standard 3: Write narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences.	Water Wonders If You Were the Boss
	Standard 4: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	Trees in Trouble (E) Water Wonders Web of Life Decisions, Decisions

		Environmental Justice for All Global Goods (E) If You Were the Boss Improve Your Place Life on the Edge What's in a Label
	Standard 5: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	Trees in Trouble (E) Water Wonders Web of Life Decisions, Decisions Global Goods (E) If You Were the Boss Improve Your Place Life on the Edge What's in a Label
	Standard 6: Write independently, legibly, and routinely for a variety of tasks, purposes, and audiences over short and extended time frames.	Poet Tree (V) Trees in Trouble (E) Water Wonders Web of Life Global Goods (E) If You Were the Boss Improve Your Place What's in a Label

	Standards	**PLT Activities**
COMMUNICATION	Standard 1: Interact with others to explore ideas and concepts, communicate meaning, and develop logical interpretations through collaborative conversations; build upon the ideas of others to clearly express one's own views while respecting diverse perspectives.	Charting Biodiversity Discover Diversity Peek at Packaging (V) Tree Cookies Trees for Many Reasons Decisions, Decisions Environmental Justice for All Exploration Energy Forest in the City If You Were the Boss Improve Your Place Invasive Species Plant a Tree Renew or Not What's in a Label Our Federal Forests
	Standard 2: Articulate ideas, claims, and perspectives in a logical sequence using information, findings, and credible evidence from sources.	Charting Biodiversity Discover Diversity Tree Cookies Decisions, Decisions

		Environmental Justice for All Energy Exploration The Global Climate If You Were the Boss Improve Your Place Invasive Species Life on the Edge
	Standard 3: Communicate information through strategic use of multiple modalities and multimedia to enrich understanding when presenting ideas and information.	Charting Biodiversity Discover Diversity Poet Tree (V) Decisions, Decisions Environmental Justice for All Energy Exploration The Global Climate If You Were the Boss Improve Your Place Invasive Species Life on the Edge Our Federal Forests Reduce, Reuse, Recycle What's in a Label
	Standard 4: Critique how a speaker addresses content and uses craft techniques that stylistically and structurally inform, engage, and impact audience and convey messages.	Poet Tree (V) Decisions, Decisions Environmental Justice for All Energy Exploration If You Were the Boss Invasive Species Life on the Edge
	Standard 5: Incorporate craft techniques to engage and impact audience and convey messages.	Poet Tree (V) Decisions, Decisions Environmental Justice for All

(V) Variation for 6-8 (E) Enrichment Activity

Grade 8 Reverse Correlations – English Language Arts

PLT Activity	Standard
Charting Biodiversity	8.RI.7, 8.C.1, 8.C.2,8.C.3
Discover Diversity	8.C.1, 8.C.2, 8.C.3
Every Drop Counts	8.I.1, 8.1.4
Fallen Log	8.I.1, 8.I.3, 8.I.4
Peek at Packaging (V)	8.C.1

Poet Tree (V)	8.W.6, 8.C.3, 8.C.4, 8.C.5
Tree Cookies	8.I.1, 8.I.3, 8.RI.6, 8.RI.7, 8.C.1, 8.C.2
Trees for Many Reasons (V)	8.I.2, 8.RL.6, 8.RL.8, 8.RL.9, 8.RL.11, 8.RL.12, 8.C1
Trees in Trouble (V) (E)	8.W.2, 8.W.4, 8.W.5, 8.W.6
Water Wonders	8.W.2, 8.W.3, 8.W.4, 8.W.5, 8.W.6
Web of Life	8.I.1, 8.RI.7, 8.W.2, 8.W.4, 8.W.5, 8.W.6
Decisions, Decisions	8.I.1, 8.I.2, 8.I.3, 8.I.4, 8.W.2, 8.W.4, 8.W.5, 8.C.1, 8.C.2, 8.C.3, 8.C.4, 8.C.5
Environmental Justice for All	8.I.2, 8.I.3, 8.I.4, 8.RI.5, 8.RI.6, 8.RI.7, 8.W.2, 8.W.4, 8.C.1, 8.C.2, 8.C.3, 8.C.4, 8.C.5
Exploration Energy	8.I.3, 8.I.4, 8.RI.6, 8.RI.7, 8.C.1, 8.C.2, 8.C.3, 8.C.4
Forest in the City	8.I.1, 8.I.3, 8.I.4, 8.W.2, 8.C.1
Global Goods (E)	8.I.4, 8.RI.6, 8.RI.7, 8.W.1, 8.W.4, 8.W.5, 8.W.6
If You Were the Boss	8.I.2, 8.RI.5, 8.W.2, 8.W.3, 8.W.4, 8.W.5, 8.W.6, 8.C.1, 8.C.2, 8.C.3, 8.C.4
Improve Your Place	8.I.3, 8.I.4, 8.W.2, 8.W.4, 8.W.5, 8.W.6, 8.C.1, 8.C.2, 8.C.3
Invasive Species	8.I.3, 8.I.4, 8.RI.6, 8.RI.7, 8.C.1, 8.C.2, 8.C.3, 8.C.4
Life on the Edge	8.RI.6, 8.RI.7, 8.W.2, 8.W.4, 8.W.5, 8.C.2, 8.C.3, 8.C.4
Nothing Succeeds Like Succession	8.RI.5, 8.W.2
Our Federal Forests	8.C.1, 8.C.3
Plant a Tree	8.I.4, 8.C.1
Reduce, Reuse, Recycle	8.C.3
Renewable or Not	8.I.1, 8.RI.7, 8.RI.9, 8.C.1
The Global Climate	8.C.2, 8.C.3
What's in a Label	8.W.1, 8.W.4, 8.W.5, 8.W.6, 8.C.1, 8.C.3

Grade 8 Social Studies Standards Correlation to PLT Activities*

*There are no PLT activities that correlate to these 8th grade standards.

Standards	PLT Activities
Standard 1: Demonstrate an understanding of the development of South Carolina during the settlement and colonization of North America in the period of 1500–1756.	
8.1.CO Compare the three British North American colonial regions economically, politically, socially, and in regard to labor development.	
8.1.CE Analyze the factors that contributed to the development of South Carolina's economic system and the subsequent impacts on different populations within the colony.	
8.1.P Summarize major events in the development of South Carolina which impacted the economic, political, and social structure of the colony.	
8.1.CX Contextualize the development of South Carolina's political institutions during the colonization of British North America.	
8.1.CC Analyze the changes and continuities of the Native Americans' experiences prior to and as a result of settlement and colonization.	
8.1.E Utilize a variety of primary and secondary sources to examine multiple perspectives and influences of the economic, political, and social effects of South Carolina's settlement and colonization on the development of various forms of government across the colonies.	

Standard 2: Demonstrate an understanding of how South Carolinians and Americans created a revolutionary form of government during the period of 1757– 1815.	
8.2.CO Compare the motives and demographics of loyalists and patriots within South Carolina and the colonies.	
8.2.CE Explain the economic, political, and social factors surrounding the American Revolution.	
8.2.P Analyze significant founding principles that led to the development of federalism in South Carolina and the United States.	
8.2.CX Contextualize the roles of various groups of South Carolinians as the colonies moved toward becoming an independent nation.	
8.2.CC Analyze the continuities and changes of how different groups immigrated to and migrated within South Carolina.	
8.2.E Utilize a variety of primary and secondary sources to analyze multiple perspectives on the development of democracy in South Carolina and the United States.	
Standard 3: Demonstrate an understanding of conflict and compromise in South Carolina, the Southern region, and the United States as a result of sectionalism between the period 1816–1865.	
8.3.CO Compare the debates between South Carolina and the federal government regarding slavery, federalism, and the Constitution	
8.3.CE Examine consequences of the major Civil War military strategies.	
8.3.P Analyze the Civil War Amendments (i.e., 13th, 14th, and 15th) as a turning point in the economic, political, and social structures of South Carolina.	
8.3.CX Evaluate the economic significance of agriculture on South Carolina, the U.S., and the world.	
8.3.CC Analyze debates and efforts to recognize the natural rights of marginalized groups during the period of expansion and sectionalism.	
8.3.E Utilize a variety of primary and secondary sources to analyze multiple perspectives on the effects of the Civil War within South Carolina and the United States.	
8.3.E Utilize a variety of primary and secondary sources to analyze multiple perspectives on the effects of the Civil War within South Carolina and the United States.	
Standard 4: Demonstrate an understanding of South Carolina's role in and response to the dynamic economic, political, and social developments in the United States and around the world during the period 1862–1929.	
8.4.CO Compare perspectives toward reform that emerged during the Progressive Era.	
8.4.CE Explain the causes and effects of World War I on South Carolina and the United States.	
8.4.P Summarize the economic changes that emerged in South Carolina and the U.S.	
8.4.CX Evaluate South Carolinians' struggle to create an understanding of their post-Civil War position within the state, the country, and the world.	
8.4.CC Analyze continuities and change in the African American experience in the period of Reconstruction and Jim Crow eras within South Carolina.	
8.4.E Utilize a variety of primary and secondary sources to analyze multiple perspectives of the challenges and changes within South Carolina and the nation that allowed the U.S. to emerge as a global power during the time period 1862–1929.	
Standard 5: Demonstrate an understanding of the impact of world events on South Carolina and the United States from 1929 to present.	
8.5.CO Compare South Carolina and U.S. wartime contributions and demobilization after World War II.	
8.5.CE Analyze the factors contributing to the shifts in the political party platforms between 1946–1972.	
8.5.P Analyze the transformation of South Carolina's economy from the Great Depression to its current economic diversification.	
8.5.CX Analyze the correlation between the Modern Civil Rights Movement in South Carolina and the U.S.	
8.5.CC Analyze the continuities and changes in South Carolina's identity resulting from the civic participation of different individuals and groups of South Carolinians.	
8.5.E Utilize a variety of primary and secondary sources to analyze multiple perspectives on the cultural changes in South Carolina and the U.S.	